



## APPENDIX A: DNA SEQUENCES

TECH CENTER 1600/2900

JUN 06 2002

RECEIVED

>RXA00003-upstream  
CATCCAGGACACAGAACATGGTAATCCTTCTCTAGGCCCACTCGAAGCCGGCGATAT  
AAGCGCCAAGAAGGCCACCCTTGCCTTCGCGGTGCAGCAC

>RXA00003  
GTGCAGGTGAGAATCCTCAGCAGCGAGCTTGTCTGCAGCCTCTCCGGTGCCATCCGGGGC  
GTGAACCTAGATATTGCAGCACCAGAACCAAGAAGTCAGGCCGCCGCACACTCACAAAA  
CCCGAATGGGATGCCGTCAATTAAGCATCTGTAAACGCCGGGATACCGAGCCACTGTAAAC  
CCCACCAAGCACAGAACATCCGACAAAGCACCAAGAACATCCATGCCCGCATTTGTGCGG  
CTCACTCTCCTCCAAGCCGTTTCAGGGCTGAGAATTGCCGAAGCCAATCAATTGCAGTGG  
AAGCACATCATCGACGGTGACGATGGCATGCTCATTAATGCCAGCGCCGATATTGTCAAG  
GGGCGAAAAGGCAAGGAAAGAGGGCGGTATATCCCTATCCTGAGGGCCGACGTAGCGGAA  
TACCTGCGTACACACCGCGAGGACGACGAGCATTTTCATCGTAGGCTCACCGACGACGACC  
GCGAGGCCCTGGGACGCGACGAACGCAGATGACAAGGTGCCCGAGCTATACCGCAAATT  
GCAGAAGCTACAGGCGTGAAGACTCTTCAAGACCTCCGAAGCCACTCCTGGCGTGCGACG  
CTGCACGGTGTGTACGCGGACGTGATGGACCCAGCTACACGCGCCGCCATTTTCGGCCAC  
ACCGAGCAGGTAGCTGAGGAGTACTACAACGACCGCCAAAATATTGAATCACTCATGAGA  
CAAGTCAAGCGCGCCTACGCG

>RXA00003-downstream  
TAACTACGCTTAAGACTACGCGT

>RXA00008-upstream  
CATTTGGCGTGGTGATCGCCGGCATTATCGCACAACTCACCCCTGCGCTTCTACGTGAGGAA  
ATAAGACTATTGAACTCCTTGCCGTAGACTTAGAAAAGACT

>RXA00008  
ATGGCCAAGAAGAAAAAGAAAGTCGACGAAAACAACCTCAGTTCTCGCGACCAATCGCAAG  
GCCCGCCATGACTACCACATCATTGATACGTGGGAGGCGGGCGTGGTGCTCTTAGGCACC  
GAAATCAAATCACTCGCGAAGGTAAGGTATCCCTCGTGGATTCTTTGCCACCATTGAT  
AACGGAGAAATCTGGCTTCAGCATCTCCACATCCCGCAGTATTCCATGGGCTCCTGGACA  
AACCACACGCCCAAGCGCACCCCGCAAACCTTTTGCTGCACCGCAACGAGATTGATTCCCTG  
ATGGGTAAAGTCCGCGACGGCAACCGCACGTTGGTTCCGCTCAAGCTTTACCTCAAAAAC  
GGTCGCGTCAAACCTCGAATCTCGACTCGCACAAAGGTAAGCAGGATTACGACAAGCGCCAA  
GATATCAAGCGTCGCACCGAAGAACGCGAAGTCACCCGTGAGCTCGGCCGTGCGATTAAAG  
GGAATCAACGCG

>RXA00008-downstream  
TAAATGAGTATTTCACATCGCAA

>RXA00015-upstream  
AAGACGCACAGAAGCTACACACATAGCTACATCGTCAGCACCAAGCCGGAACAAGAACT  
ACAGCAACCGACGACACTCAACGAGCGCGACCTCCAAGAC

>RXA00015  
ATGATTGATATGTGCACCACTCCTCGACAAGAGATCATGATCCGCGAGCAATTTAAGGAG  
ATCAACAACGGTAGGGTTGTACCTCATTACGATCAGCTTGAACAGCTCGCAGAGATTTTT  
TCAACTAAAGACTCAATCGACATGGTCAACGAGATACTCAATCGCGATACGGATTTTCTC  
AGTAATGAAGGCACAATTTTTATGGAATACATTTTCAACGGTGGATTCCATACGGACAAC  
GGCTATCAACCGTTGTCTATGCATATGTTGAACGAGGCTTAGCGATCCGCCCTCCACGC  
ATAGTGCTC

>RXA00015-downstream  
TAGATATGACACAAATCGGTATT

>RXA00018-upstream  
CAACCCGCCCCACAAACACATACAATTAACCTCTATATTTAGTAAATAAATAACTAGTAT

TTTAAATGACTTACAAATATCAAGAAAGAATCTATTTCCTT

>RXA00018

ATGTCCGCATTATCTAGACCGCACAAAGATCGCCACCGGCGTTGCTGTCGCAACTCTTACC  
CTCACCTTGTGTACCTCTGCTGCCGCGCTTGTCCATGCAGCGCAACAATCCATCAGCGGT  
CCAGAATCCTCCTGTGCTTTTAAATCAACAGCGTTGGGATGACAGCAAAGTTAAGCTTGAC  
GACACCATCGCTACGGCCAAAACTCATTTGGTACAAACAGGCGAACTGCACCGCAACGAA  
CAGGATCTACTTACTGGCTATCTTTTCCAGCAACCGCACAGCAGCAATTACCTTGCACTC  
AACAACGCTTATGCCGATGCCGTAGCAATCAAAGACAGCTTTGTCCGCCAACATGTGAC  
GGTCTTAAAGAGTCCAAGATTGCCAGCGAACACGCGGTGTCTGAGGTTGTGGGTGCAGTG  
AATGTACTCGCCGAGCACAAAAAGCGCTGCAGATTAACCTCCGACACCTACGAACAGCAA  
CGTCGTTGTGATGCCCTTCGTCTAGCAAGCCGAGATGAATCAGATGTTCTTATGCGCAT  
GATCGCACCATGCTGCAGCTTCGTGCGACACTAGCTGACATTGACCAGGCGTCCACAGAC  
ATTTCGCGATATTTCGGGCTCAAACAACAAGCTTTGAACGTGATCTTGCCCGCGAGCAAAAA  
GAGGCCGACGACAGCAGCAGTGTCTAAGCTGTAGACACTTCGACCACACCAACATCAAGC  
ACAGAAGATCGTGTCAACGACATTCCTTAAAGAGTCCCGTACCGATCACAGTGGCGACAGT  
TACACGCGCTCAACGACAACGAGCGCACAAAGCACTGAGCCGGATTCTGCAACCAACACC  
TCATATCTGTACAGTCGTCTCGACAGCCTGGAACGAGTGCAGCAGCATATTGATCTCAAT  
ACCCAGTGCAGACAACCTCGATGATCTTCGTGAACCTACCAACAATGACACGCGTGATCAC  
ACCGGCTCCGTCAATTTCCATTGCCGATCAACTCACAGACATCACCAATGAAATCAATGAA  
TTACGCGATAGCACTTTTGCCACCAGAGACAGTGCCCAACAAGCACAGGATCAGGTAATT  
GCTCAACGTGAAGAACTGCAACGAGCAAAGGAAGCACGACTAGAAGAACAGCGACTCGCC  
AAAGAAGCAGAAGAGGGCGCTCGCAACGCAGCAATTCAGGAACGTGACGCGGCCGAAGCA  
GCACTGCGTGAAGCACAAAGACCTCCTCAGTCGCCTCGATGACACAGGCAACGCAACCAGT  
GATGACACAGCAGCGCTAGTAGACGGTCTTCTCAATAAC

>RXA00018-downstream

TAACAATCAGCAACACCGCTCAC

>RXA00020-upstream

TAGGAGAACTACCTTTCTTGCTGGTGTTACCTAGCTTTAAGTTTGTTAGAGTAATTAATG  
AATAACTAAGTAATGTAAGTAAAGGGACTTTTAAATAACT

>RXA00020

ATGACTGTGACCACCGCACAAACGAATCGCTGACGAATTTCAACGTGGCATTAGTATCGGC  
CCGTGGGATCTGTGCGAAGTACCAGCAGGCGATGACTATTTAGAGCACACCACCAAGGTC  
AGGCGACGCCACAGCACGGCTGTAGAGATTCACACTGACTCTTTGATCATTTGTGCGCCT  
GAAGGCAGTACGTACAGCCACAACCGCACTAAGGCTGGTCTTGCGTCCACGGGCACAGTC  
ACTGTGCCAGTGAAGGGGCTTTCTGAGCCTGTGAAGCTTAGTCTCAATCTTCTTGCTGAT  
TATGGAAACTCCTTTGACACTGTGCACGACGATCTGTGGCAACGAGAGCTGCGTGAGCAG  
ACGCGGGGGCAGTTACTCACACTTAATGCAGTCTCCGGTCTTGGGGATGACAGCGTGGCG  
ATTATGGGCACGCCATGGGGCGATGGTCTCACGGGGAGGCCAACACCATTAAGGTCTGT  
GAGCATTTTGTCTATGTGGGCTGCAGGTTGCCGCTTTGAAGACGGTTATGGTCTGTACGCA  
CTTCGAGAGGATCGCCATGTGCGACACCAGGCACGTGCGGGTGAGGATTCCACTGCACAT  
CACGGTTGGTTGCTTAAAGGCACAGTGTTCGGGAAAGAACTCACCGGTGATGCTGTGACG  
GCAGCCATGACAGTTTTTATGATGTGGTGGTCACTGTGATGAGGGGCGTATCCCTGGC  
ATGAAATCAGGACAACCGTTTTCTATGGCAACCCGTTTACGCGCATCATCTGCGCCTGTG

>RXA00020-downstream

TAGAGACTTTTTTCAGACCTTAAC

>RXA00021-upstream

AAAAGCAACTCACTTCGTGCTTTTTTTCACCGACCCCGGCTGTGTGGATGCCACCCACTTA  
CACCGCACAAATCGAAAATAAAAGTAAAGGATGTTTACCTT

>RXA00021

ATGTCTGACACCACAGACAGCCACGACCCAGCAACCTCCCCCTACAGTCGATTTCAGCCGCA  
TCCGGTACTTCTGACCCCAACCAGCAACCCAAGAAGAAATTCACCATCATTAAGCAGGTG  
AACATGATTGCGCGTACTGCCATTGATGACTGCATTAATCGACTAGGCCAGATGTTGTG



ACCATGTCCAGCGAAGACATTGCTGATCAAGTGGTCAACTCCATTAAACGTTGCTATTGCC  
 AGAGAAAACACACGTGCCCAAGATGCCAATGCTGCGGTGCGTTACACACCTATCTTTAAG  
 CTCGATTTCTCCCATGTCGCTGTCCTTATGCGCAGACTGCATGTGATTATCAACATCGCG  
 CCATCGCATAACTCTGATCCTGACAGCGATATGTTGGCTATTTACGACCCCAACCCACGC  
 AGCGAGCATTACGGGATCTATCGCACCTCAGAGGCTGAAATACGCCGCGTAGCCCGTGAA  
 TACTGCCCTGACCTCACCTCAGCGCAGTTTAGAGAACTGCAGATGGCACTCTCAGATGCT  
 GCACCTCGTAAAGTCCGCCACAAGCAGCGTGACTTGATTCCCGTGAAAAACGGCATCTTT  
 AATTACTCGACTAAACAACATAGAACCGTTTTCTCAAGAGTTTGTCTTTCTTGCTAAATCT  
 GCAGTGAACATAACCCCAAATGCACAAAACCCTGTCACTCACTCATCCCCAGGATGGCTCT  
 GTCTGGGATGTTGAATCATGGATGAACGATCTCTCCGATGACCCTGAAGTCGTAAACCTG  
 CTGTGGGAGATTATCGGCGCTATCGTGCGCCCTATGTGTCTTGGAACAAGTCTGCCCTGG  
 TTCTACTCAGAGGCCGGCAACAACGGTAAAGGCACGCTCGTTGAGCTCATGCGCAACATC  
 TTGGGCGCAGAGGCCTATACCAGTATCCAGCTCTCGGACTTCTCTAAAGAGTTCCACCTT  
 GAATCACTGACTCGTGACACAAGCAATCCTTGTTGATGAGAACGATGTCGGCGCCTTCTTA  
 GAAAAGTCAGCAAACCTTAAAGCGATTGTACCAATGACGTCATCTCCATTAAACGCAAG  
 CACAAAACCATGCTCAGCTATCAGTTTTATGGCTTTATGGTGCAGTGATTAACGGCTTC  
 CCCAAGGTCAAAGACCAGTCGAGTCATTTTTTCAGGCGCCAACTCTTTGTGCCGTTTGAG  
 AAAAGCTTCACCGGTGCCGAGCGCAAGTACATCAAAGACGACTACATGTCGCGCACTGAT  
 GTCCTCGAATATGTACTGCACCGCGTACTGCATATGAACTACGACAATCTCTCCACCCCT  
 GCTGCAGCTCTCGCTGTGCTGGATGAATACAAAGAGTTTGTGATCTGTGCGCGCATTC  
 TGGAATGAATTCAGCGATCAATTTGTCTGGGATCTTCTTCCCTGCAATTCCTCTACGAG  
 TTTTATCGCAAGTGGTTTGACCGTGACAGCCCATCCGGGTCTGTGCTCGGCAAACGCAGC  
 TTCATTCAAAAAATCACCACCATCGCCGTTGATAGCGGTGAGTGGGAGTATCCGCTGACA  
 GCACAGCGTCCCGGTGGCGATATGGCCGTTCTTGAGCCATTAGTCATTGATTATGACCTC  
 ACCGAGTGGCAAAACGCCACTGTACCTAAAGGTCACGTCAACAAGGGGCTCCCTCTACCA  
 CTTCAAGGCTAATTATCGAGGACTGCTCCGCAAACTCTAACAACACCTGCTACTCCCCCT  
 GCAGCGCCGGTCAACCCACACCACCCACCCCT

>RXA00021-downstream  
 TAACAACCACAAGAAAGATTTAT

>RXA00022-upstream  
 AGGACTGCTCCGCAAACCTTAACAACACCTGCTACTCCCCCTGCAGCGCCGGTCAACCC  
 CACACCACCCACCCCTTAACAACCACAAGAAAGATTTATC

>RXA00022  
 ATGTCCGCTCCAACCATCTACCCCGGCACCAAAACATCTATTGATCCGATCACCATGGAT  
 GACGCTCGCATCATCTTTTTCGATATTGAGTCGCTCCACAATATTTTCACGGTAGCAACC  
 TACGATTCTCTGTCCCACCACGTCGATGTCTTTTACCTGCTCGATCACACAACCAGCCCT  
 CAGATCACGGTGCTGCCGCACTCAATGGATTATTTTCGATCAAACGCGCAGCGATGCTGTT  
 ATGGCTGCCATCATTTGAGCAAAACCTGCGTTTCGAGAAATTAAAGGCTCACCATTACA  
 ACCGAGATGTAGCCCTCCACAATCTCGGTGACACCAACGCCAACCAGCGCTGGCAGTCT  
 AACGTGCTGCTTGCCCGGTACTCGGGGTATTAGTGTGCGCGGAGAGGTACCTGAGCAC  
 CAGAGCCACAACCATCTCGCCAAGCAGTTTGCCGAGGCAACCTTGGTCACCAGGGACTTC  
 GATGTGAATTATGATCCAACAAGCGCTCACCCTTTTACTGCTGGCTTCAACTCGATCAAC  
 TATGACACCACCTTGCTCAGCCTGTACTTCGCAATGTTGACCTCAAATATCGGAAGTACA  
 CCGACGTATTTCCCGGTGATCACCGCACAAGAACTTCGTGCGCATAACGACAAGCTCTTT  
 AGCCCTGAGTTTCATCAAAAACATGCCAAAGTATTTCTGGGATCGCGACAGCGGTGCTGGA  
 CTCAGAGCTGCATCG

>RXA00025-upstream  
 TAAATTTCTCAATGGTGTGGAAACACTTGGAAACAAGCTGCCCACACCATTTACGCTTTT  
 CTTGATACTTTTCTTGATCACGGCGCTGGCTTCATCGATC

>RXA00025  
 ATGGCGTGATGAACGTATCCGTGATTGTTCCAGGCTCTGATGAGGAACATTTTGTA  
 GGCCTGTTACCCGTGAAGGCCTAACCTGGTTGACTACGAATCTCGGGGCAAACTACATC  
 GGGTTCCCGCCGTGCTCACCCTGTTGCCAATTCTGTTGGCAGTGGGTGTTGCTGAACGT  
 TCCGGCATGTTGGCTGCGCTGATTAGGAACTTTTTGGTTTCGGCGAAAAAGATCGTTTTG

CCATATGCAGTCGGTGTGATTGGCGTGACCGCGTCGATCATGGCGGACGCTGCCTTCGTG  
 GTGGTGCCACCTTTGGCCGCGATGGTGT'TAAAGCTGCTGGTCGGCACCCTGTGGCTGGG  
 CTATTGGGTTCGTTTGCAGCTGTGGGTGCAGGATATTCCACAGCGATTGTGCCACCAGC  
 CTTGATGCACTTTTTGCGGGAATTACCAACGCCGTGATGGAGACACTTCCAGGCATTGCG  
 ACAACTGAAGTCAATCCGGTTTCTAACTATTACTTCAATATTGCATCCTCGATTGTGTTG  
 GGTCTGTTATGTGGTTTCCTCATTGATAAGGTGCTGGAACCTCGGATGTGGCGTCAGAAA  
 ATCGCTACGGAGTATGCAGAAAGCATTGAACCCACCAGCGCAGCAGATGATGAGGAAATC  
 TCTGCAACCCTAACCGCACAGGAAAACCGCGCGCTGACAATTTCCATGTGGACCACCCTG  
 GCGACGGCCATCATCGTGCTGGTTGTGGTGCTGATTCCGGGATCCCCATGGAGAAATGAG  
 GATGGTGGATTCTTGCCCTACCTCGCCACTGCTGAGCTCTGTGGTGT'TATTGTATTTTTG  
 TTTTTCATGGTGATGGGCCTGGCCTACGGCATGGTGGTGGGCACGATCAAGAACATGGAT  
 GATGTCGTGAACATGATGGGCGAAGCAATCAAGGACATGATTGGTTTCTTGGTTTTGGCC  
 TTCATTTTTGGGACAGTTTGTGGCGCTGTTTAACTGGACGGGCATCGGTACCTGGACTGCT  
 GTTCAGGGTGCTGCGGGATTGGAAGCGATCGGGCTTACCGGATTCCCTGCGATCATTGCA  
 TTTATTATTTTTGGCGTCATGTTTGAACCTGCTGATTATTTCCGGCTCTGCGATGTGGACG  
 CTGATGGCTGCGGTGTTTCGTCCCGATGTTTCGCTCTGCTTGGCTATGAACCATCATTCAAT  
 CAGGCAGCATCCCGCTGGGTGACTCGGCAACTCAGGTGATCACACCGCTGAATCCGTAC  
 ATGATTGTGATCCTCGGTTTGCTCCGTCGATACGAACCGGATGCAGGTTTAGGCACCTTG  
 ATGTCAAGGCTTATCCCATTTGTGATCCCTTTCTGGCTAGCCTGGGCTACATTGTTGGCA  
 ATTTGGTTCTACGCCGATTTGCCGCTTGGACCTGGCTCTGCGATCTTCCTCGAAGGA

>RXA00025-downstream  
 TAAGTTTTTCATGAGTACTGACAA

>RXA00027-upstream  
 TTAGGCAACGACTCCGAAACCTTCAAGAACGTGTGGCACTAACAATTGCGGACTATCCTT  
 GGGAAGTGT'TTAGATTTTATTCAGGGTAGGGAGATTGTT

>RXA00027  
 GTGGATGAACGAAGCCGGTTTGCGCGCAGCGTTTTCCCGGACGGTGAAGAACCAGATCCA  
 CGTTTTCACTTTGGCCAATGAGCGCACGTTTCTAGCATGGACCGGTACGTCT'TTGGCGTTT  
 CTTGCCGGTGGTATTGCTTTTGAGGCGTTCCAGATCAGTGGACTATCGGATACTGTCCGT  
 ACAACAATCGCGGTTTTTATCATTGCGGTGGCATGATCATTGCCGCTGGTGCTGCGGTG  
 AGGTGGATGAATGTGGAGCGTGCAATGCGTAAACAGAAAGCCACTTCCCGTACCTGCGATT  
 ATTCCGTTTCTGTCTATTGCGGCTTTGGTGGCCTCTGCGGCTGTCTTGGTTCTGATTATT  
 GTTCAG

>RXA00027-downstream  
 TAGCTATGCGCATTCATGAGGAT

>RXA00028-upstream  
 AAAAGTCCTGGCCAGAAAACCTCTCTATACTGTGCAGCATGGCACCAACGATCACCGACAT  
 CCATGTTCTGCTTCGTGCGGGTGAGCGACAATCAGTGATC

>RXA00028  
 ATGACCCTCACTGCCTCTTCCTTGGAGGCCGGGAAAATGTCTTTTAGTGGCGGGTATATC  
 GTGGGCGAGACGATGATCTTCCTCGTCGATCCCGATGAAGTCGAGATACGACGCAGCCCT  
 AACAGCCTCCACGTCTCGGTAACGGTAGCGATATTCTGCGCCGCAACGAGCATCATTGC  
 TGGGTATTTGAGAATTTCAATAAACCCATTGACCCACCTGTTCGATTGGGTCTTCGGGAT  
 ATCATCTGCCCGAGCGCCTTGGCCTGGGTTCTTCAACAGCATTCATCTCCCGGTCTCTTA  
 TCCCACCACTTACGCGGATAAGATCACTGCGGGAGAGATTGCTGGACGCCCCACCTGG  
 ATCCTCCGTGAGGAACCTACTTCAGGAGGGCAGGACCCAAGTCGATTGGTCAGTCTTGAA  
 ATCGACCAGGAACACGGTGTATCCTTGCAGTGGAGACTGGACAAGAACGACTCGAAGCC  
 ACGGAGATTTCTTTTCTGACACTCTTCCTAATCCTTCTGGGACGGAGCCTGGGAACCA  
 TTCCATTATCCAGATTCGACACCACACACTGCCCCTGATGTGCTGAAATACCCGGTTAC  
 ATTCACTGACTGCCGCCGAGTCTGAAGATCCTCGCAGACTACGAGTCTTCGTCAATGAG  
 ATAGCACTCGAAGGTGATTTCCCTGACTACCGTCAAGGACAATCTGTGCGACTTACTTTG  
 GGAATTAGCTCCTCCCTGTGCCACTCGAAGGAATGACAACCAGACGCCGGGGCCGGGTA  
 CGCAACCTTGGGGAAGAAGCTAGTCCAGGCGATGACGGTATGCCCCAGTGGCCAATCCTG

CTCACTGGTGATGGGTGGACGGCGCTGGCCTACACTCCCATCCCCAAACGTGGAGATGCA  
GAGATCCAGGGGTGGTTTTATTATTCCGCCCTACGGAATTGTTGATGTTCCACAGATCTA  
CGGGTAGAGCGTATTTTCGCTGGTATCGGCACAAGTGGCACCAACGAGCGTTTGTGGCAG  
GAGATAGACAATACTTCTTCGGCTTATCACTCGGAAGATTGGTGGATCCGCGATGTCGTT  
TTAGACGTCACGTTGGATGGAGCTGTTCCGCCCTCCGCTTAGACGTGACGTCTTCACTGCT  
GTCGATCCTATTGTGGCGGGTGACAAATTGTGGCTGTGTGACGTGCACTTTCGGGTAGCC  
CGCTGCTGGGAGACCACGACCGGCCGATACTTGGGGCAGACTTTAKTCCCAGCACCCTG  
CGAGATCGATCGTACGTCTTGAGCTGCACAGCGACCAACAATTAGGAGCCGTAGCGGCA  
AGTGGGAAGAGTGGTTGGATTCTCACACCTGGTCAAGCAGTAGCCACTAAAGCTCCTGAT  
TGGACTCCTCCCACCCGGGCAACCGATCTGCCTCAGGTCCCCCTCCCCCTGGGAGATCGTC  
GCTGTCCGTGGCCAAGGTCTGTTTGGAGCTGCAGGTGGAACTAGTAGACGCACCGCCCTC  
GGTCGAGTTAATGCGACCGGTGGCGTCGACATCGGTGAACTCCCGCCCAACGGCTATACC  
ATCAGTTCTGTGGTTCAGATCGGTGATGAATACATCGTGGGCAGGTGGGTAGAGGAATAC  
CGGCTCAACTCCAACTGGAGGTCAATTTCTACCAAAGAGCTAGATATCTCCGCATCCGGA  
TGGAAGAGCAAGGGGACGGTTGCTTATCTGTGCGAAGACACTCACATATGTTTCTTCGAC  
CAGGTGAGCGGGGCGGAGCTTCCAGCCTGGGTATCGCCGAGGGACACCAGGGCGAGGTT  
ATGTCAGCAACTTCTTCAGAGAGCATCGTGCTTATCTACCGGCGCAACCCGAACAATTCA  
ATGTCGATTGTCCCGACTTCCGTTGGCACCTATGACAATGGCACCTGGACGACTATGCCG  
CTACAGGAAGCTCCAGCGGAACGTGTCC

>RXA00028-downstream  
TAAACTGCTCATAGACTGCTGAG

>RXA00031-upstream  
CACACATCGCCTCGTCATCCTTAGACACGCCAAATCTTCTTGGTCCACCGGAGTACTCGA  
CCATAACGCCCCACTTAATCAACGTGGGCTTCGCGATGGC

>RXA00031  
GTGGCAGCTGGCCAATGGCTAGCTGGCAACATCGGGCAAATTGATCATGTGCTGTGTTCA  
GATGCCACCCGCACACAATTAACGTGGGAACGCGTCCAGCTTGGTGGCGCAACCGCCAAA  
GGCTCTAGCTTCCACAATGACATCTATGAAAACCAAGTGTCTGAATTTAAACATTTAATA  
ACAGGGCTCCCAGATGTAGTTGGTACCGCCCTACTCATCGGGCACTGGCCAGGCGTGGAA  
GAACTAGCCCATTTATTTTGGCATCCGCGATGAACATCCCGGTTGGGATCAGATGGAAGAA  
AAGTTTCCCACAGCGCCATTTGCGGTGTTGGAATTTAACACCCCTTGGTCAAACTTGAG  
AGAAACTCTGCTCGGTGACAGATTTTGTCAATTCACGGGGT

>RXA00031-downstream  
TAGTTCTGCTTCAATTGAACAAT

>RXA00036-upstream  
CTCTACCCACTTAAAATGGACGCATATTCGCAAGATAAGGCATGCTTGGATGAATAGATT  
TTAACTCAACGTTTACTAAACAGAATCGGAATTAGGAGCC

>RXA00036  
ATGCTTGAACGCACACAGGTATTTCGTGGATACGTCTTACCTGCTCGCAAGCTTTTACAAC  
TCTTGGGAGACAGGGGCACGTGCCCAATTAGAAATCGACCTCCCCGAAGTAGTCGGGGTA  
TTAGGAAGGATGATTGAACAACAACCTAAACAGCCAGTACAACGCCAAATGTGGTACGAC  
GGAATCCCCGATTCCGGCCCCCACCCTATCAACGAGCACTACGCACCTGCGATGGTGTG  
CAACTTCGTGCTGGCCAATTAATTGAATGGGGCGAACGCCGCACACAAAAGGCAGTAGAT  
ACCCGCTTGTGTCAGACCTCGTTCTCGCAGGTGTTTCGCGGACAATGCTCCGATATCGTG  
CTCGTCAGTGGCGACGCCGACATGATCCCCGGTGTTCAGGAAGCTGCCAATGCAGGCCTT  
CGCGTTACCTCTACGGCTTCGGCTGGGATTCCATGTCTCCCAACTGCGCCACTGCTGT  
GACACACCACCATTTTGGATCCTCGAGAAGATTTTGCTGAATGCATGCAGCTGCAGGTT  
CTCGAAGGTCCACTACCCCTGTCGTTTCGGGTAAAGCCCATCAACGATGCAGAACCCATC  
GAGGATTTGGATTTCACTCCAGTTCCAGGCGTCGCTCACCATTGTAAGAGGTCAGCGCG  
AAAGATGAGAAATTTCTTCCACGCCCAAGTGAACCTGCCGAAGCTTTGTGGAACAGGTC  
TGTGAAGCGCAGTATGAGATCTCAAACACGAAGGTCAAACCGCTGATTGAGGAGAAATC  
ACCGAGTCTTTGAGGCGCTGAAATCAAGGTAAGTGAATTTTGGAGAACCAGCTGCT  
CCAGTAGCGGAATCAGGCGTAGAAGCTCCCACTCCGGAAGCTCCACGGTTCTGAGGA  
GCTAAGCCCACTCCGGCGAAACCTAAGACTCCAAAGGCAGAGCCCCAAAAGCAAGAATCC

CCCAAGCCGGGAAGCTCCAAAACCAAAAGCTCCAAGCCCTGCGGATATTCCACCGAAAGCC  
CCAGCTGACACTGAGGAACATTTCGGAAGTCGAAGCTGAAATCGAGGACTCACGTCCAAAG  
ATCCCCAGCCCTTCGATGATGGCTCCCCGCCGCAAGCTTCGTTCCCGCTACGTTCCGCTT  
CCCAACGAAGTGTGGGCAACAGCAGGATTCCAAACTCCTTACGATGTCGGGCAACAGTAC  
GCATCGTGGTGGTTTGAACACGAGCTACCAGCACTCAAAGAGATCAGGCTCATCTATTG  
TCTGGTGGCGGACTTCCACCAGAGATCGATCGCCCGCTTCTGCAGTTTGCTTGTGAAACT  
CTCCACGAATACACCCTGACTGAAGCGCAGCGTAGCTTTACGCGATGGCTTTCCTCTCC  
GGAATCCGTGGTGTATTGCTCAACCAGCGAGATAGC

>RXA00036-downstream  
TAGAATCACAAAAAAGTGGGGCT

>RXA00037-upstream  
AGCGAATCGGATTTCAGTGATTTGCTTGCGGGCGCAGAAATGATTTTTCAATTAGACACAC  
TTAGACACACGTAATAAACCTCAGGGAAGTGACTGATA

>RXA00037  
ATGGCTAATCCGCTCAGCAAGGGCTGGAAGTATCTCATGGCATCGTTTCGACAACAAGATC  
GATGAGAATGCAGATCCAAAGATCCAAATTCAGCAAGCTACAGAAGCTGCCCAGAAGCAG  
CACCAGCAGATTATGCAGCAGCTTCTCAGATTATCGGTTCAGCAGAAGCAGCTTGAGATG  
AAATTGAACCGCTTGGTTACTGACCGCGATAAGTTGCAGGAACAGGCTCGTCAGGCAATT  
CAGTTGGCAGATAAGTCCGCAACGAAGGCGACAGTGTTAAGGCTCAGGAGTTCAACAAC  
ACTGCTGAGGTTTTTGTCTCCAGTTGGTAGCTGTGGAACAGCAGTTGGAGCAGACTACT  
GCGCTTCATCAGCAGGCTGAGGTTGCGGCGAAGGATGCTGTTGCGAAGTCTAAAGAGTCT  
GAGATGCGCCTGAAAGAGCAGATGTCTCAGATTGATGCTCTACGTGCGCAGGCTGATCAG  
GCGAAGATGCAGGAAAGTGCTACTAAGTCTATGGATTCTTTGAATCAGTTTGGCACTCAG  
GATTCTTCTGTTTCTTACCCTTGATGCGGTGCGTGAGAAGATCGAGCGTCGATACGCAGAT  
GCTTTGGGCGCGCAGGAACCTTACCCAGAACACTGTTAGTGATCGCATGGCTGAGATTGCG  
CAGTCCGGCACCGATATGCGGGCGTCAGTCTGTTTGGCTGAACTTCGCGCGGAGGCGCTG  
GGCAGTCCGCAACGCCTAAGGGCCAGCTAGAGGCAGGTGTCGAGGATGCGGAAGAAGCTT  
ATCGACGAAACCTCCACCCCTTCAGCTACCCAGAAACCGCAAGCCAGAGCTGATGCT  
CCAGAAGCATCCGAGACGAGTCCGAGAAGAAA

>RXA00037-downstream  
TAACCTAAACACAAAAAAGTGGG

>RXA00049-upstream  
CTGAATCATGATTCTATAAATGAACAAGGGTTCAGATTTTACAATACCCCCATTCACCCC  
CTTATATTTAAGTACCCGAGATCAGCTAAGGTTTTCCCT

>RXA00049  
ATGCCCACGCCTTCGCAGCACAAAGGACGCTTCAACAGCACAAACCGACAACCAGGTACCA  
ACTGGCCGCGCTGCACAAAAACGCGAACAACCCGCGCGCTGATCACTTCCGCTCGC  
ACACTCATGGCAGAACGGGTGTGCGACAATGTAGGAATAGCTGAAATCACCGAAGGCGCA  
AACATCGGAACGGGAACCTTCTACAACACTTCCAGACCGTGAACAACACTCTCAAGCT  
GTCGAGAAAGATGCCTTTGAATCCGTGGGAATTGCCCTCGACCAGGTGCTAACCAATTA  
GACGATCCGGCTGAAGTATTTGCAGGGTCGCTTCGACATCTAGTACGGCACTCGTTAGAA  
GATCGGATTTGGGGCGGATTTTTTCATACAAATGGGTGCTGCTCATCCCGTACTCATGCGC  
ATCCTAGGACCCCGCGCACGCCGAGATCTACTTCATGGTTTAGAAACTGGCCGATTACCC  
ATCGAAGATCTGGACCTAGCAACCACATGCACTTTTGGTTCACTCATCGCAGCGATCCAA  
ATGGCGCTTTCTGCAGATCAAGATTCCAACGATGACAAAGATCAGATTTTCGAGCCGCG  
ATGCTCCGGATGGTGGGTGTTCAAGCAGCAGAAGCCCGGAGATCGCTTCGCGTCCACTC  
CCCGAAATATCCCCAGTCAAACCGCAG

>RXA00049-downstream  
TAGTGATCGGGCCTCAAATAAAC

>RXA00052-upstream  
AGCTAAAGTTCTAATTTCCCTAAATTGGTAAAGATCGGAACCTCAAAAATGTCGCTTCGAAA

GCTCACAAAGCTTAATTGGCATACTGGCTGTTGTTGGCCTA

>RXA00052

GTGGCGTTTATCCTTTTCAACTTCGTGAAAACAAACGACGAAACATCGAATGTCTCTCAG  
AGCGAGTCAACTGCAGAGACAGTCAGCGAAACAAATGGCGTGCTCTCCGACGGCGCAGAA  
AACATCGCTTCTCAATCTGATGAGAGTAAATCGGGTGTAGAGATTATTGATTCTGGATTT  
GGGCGAGAGCTCAAATTCGGCGATGGCAATTGTTATTGCCAAAACCTCTGGTGGGAAGCCTC  
GCAGGGGAATTTGTTACGGCGACGGTGAATTTCTCTCGATGAAAGTGGCGCCGTTGTAGCG  
ACTGAAGATCAAGTAGAAACACTCAGTTGGGAAGACCAGGAATTGGTATTGCCAGTATCT  
CACTACAAGGAGGATTCAAGCCGCCAGAAATTACAAGCATTGAGGCTTTTCTTTTCAGTA  
ACGGATTACGGTTCAGGACAACCAGATGAACTGCATTGCCGGTGTGGAAACCACCGAT  
ATTTCCAACCCATACGCTGGTAGTTACAATGCCTCATTTGCGTTGAAAAATGACTCCTCA  
GATGATTTTAAAGAACCTGAGAGTTGGTATTGTTTGTCTACAACGAGCAAACCTGACATCATT  
GGTGGTGGTTTCAAATTTCCGAACCTGGTTCCAGCGGGTGGGAGTATTGCAATGGACGCT  
AGTGTGACGGTCTCCGAAATGCCAGCTTCTTGTAAAGGCATATTTAAATCAC

>RXA00052-downstream

TAATAGATTCTTAAAAGGCAGCA

>RXA00054-upstream

ATGCTGAGATCCGCTGGGTGGCACCACACGAATTGGAATCTTTGGAGTGGGCACCTGCTG  
ATATTCCTGCGGTGAAACTTCTCGTCGAGCAGCTTGCTTA

>RXA00054

ATGAGCCCATTCGATTCAAAGCTTGGTCGCGATACCCATTTTGGATTCTCTCGATAAGACC  
ACTGCTTCGCAACAACCTGCTGAATCCTTCATTGATTTCTAATGAGGATCCGCACACCATG  
TTGCAGGCGATCAAGTTAGAGCTTCGTACCGCACAGTCTTTTACATTTTTCAGTCGCTTTT  
ATTTCCAGTCGCGGTATCGCGTTGTTGAAACAGGCATTGTTGGACTTCAAGGGTAAAGGA  
CGAATTATCACGTCCCGCTACCTGGATTTCAATGATCCAACGATGTTTCGTGAGCTTCTT  
ACTTTGGAGAACGTGGAAGTCTCATACATCAAGGCGATGGTTTCCACTCCAAGGGCTAC  
GTTTTCCATCACGACGTGGGAATCACCGCAGTAGTGGGTAGTTCCAACCTCACAGATAAT  
GCTCTGTTGGTAAACCGGGAATGGAATCTGAAGTTCTCTGCCAGCAAGAATGGCGACATT  
GCTTTTCAACTTGATGATGCGATTAATCGCCAAATTGAACGATCCACGCCACTGACGCCT  
GAATGGATCTCAGAGTATGAGGCAACCAGACGTGTACCTGAGCGTTTGGTGTCTCAGAAT  
ATTCTCTCTGAGGATCAAAGTAACGCCGGAACAATTGTTCCAAACGTCATGCAGGAAGAG  
GCCCTCGACGCTCTACTTTCTTTGACGGAGAAGGGAGAGAAACGTGGTGTCTATTATTTCT  
GCGACAGGAACCTGGCAAGACTATCCTGGCTGCTCTAGCTACAAGAATGCTCAAGCCTGAA  
CGAGTTTTGTTTGTCTGTCACCGCGAACAATTCTGGATAAGGCGCGATCCGAGTTTCATC  
AAAGTTCTTGAACGTCCCGCTGTTGATTTTCGGAAAAATGTTCTGGCTCGACCAAGGAGCTA  
GATAAGCCGTTTGTGTTTGGCACCATCCAACGCTGACAAAGGAAGCTACACTTTCCAG  
ATCTCCCCTACTGACTTTGATTTAGTCATCGTCGATGAAGTCCATCGCGCCGGTGCCGAA  
TCCTATTTGGCATTGCTCAATCATCTGCAGCCACAGTTTTTTATTGGGCCTGACTGCTACC  
CCAGAGCGAACTGATGGATTCAATATTTATGAGTTGTTTCGATTTCAACGTGCCATATGAG  
ATCCGACTTCAAGCTGCTTTAGAATCCAACATGCTCGTACCGTTTCACTATTACGGTGTCT  
ACAGACTTCACGCTTGATTCTGAAACAACGGTGACTGATACCTCCAAACTAAGTGCCCTTG  
GTGAGCGAAGAGAGAGTCCATCACATTCTGGAGGCCCTCAAAACTTATGGTTCATCCAGAA  
AATGTTTCGTGGACTGATCTTCTGTTTCCAAGACTGAAGAGGCTGAGGAGCTGTCAAAACTT  
CTCGACCAGTCGTTGTTAATGGCAGCTTGCTTAAAACCAAGGCGCTCTCTGCGAAGGAC  
TCAATTCCCTACCGCGAAGAGGTTGTAGCTGAGCTGGAGTCCGGCGACCTGGACTACATC  
TTGACGGTTGACATCTTCAATGAAGGCATTGATATTCTTCGGTGAATCAAATCGTAATG  
ATTCGTAGTACTCAATCAAGCATTGTGTTTACGCAGCAGCTCGGGCGTGGACTCCGAAAA  
GCTGCTGGCAAAGACCATCTGCGCGTTATTGATTTTCAATTGGCAACTACGCGAACAACATAT  
CTCATTCCCATCGCATTGTTTGGCGATAATTCTCGCAATAAGAACAGCATCAGACGCCGC  
CTGATTGAGAGCGATATTGATGGAACAATCTCAGGTGTTTCAAGTGTTAACTTTGATCCC  
ATCGCGCAGGAGAGAAATTTTGTGCTGCGTTGAAGGCTGCGAAGTTGGACTCAAAAGCACAA  
TTCAAGCAGGATATTGTTTCAGCTTCAAGATCGACTCAATCATGTGCCAGCACTGTTAGAC  
TTCGCTCGCTTCAATACTGTTGATCCGTTTATCCTTGCCACGCATTCTGGCAACTACTGG  
TCGCTGCTCAGTTCAGTGAAGTTTGTGATCACGCTCCCAGCGAATCGGAGAAGTACTTT  
CTGGATTTCTTACCAGGAGAGCTTCTTAACGGCAAGCGACCTCATGAGCTGTTGCTGATC  
CAGGAACATAATGAAACAGCCTGAAACTTCTACTGAAGAATTCGTAAGCTCTTGCAGGCC

CAATCGACTAGTTCAGATGAGCAAACAATCAACTCGGTTGAAAGGATTTTGAGCCAAGAA  
 TTCTATACGGGACCAAACCGCAAGAAGTTTGGCGAACATCCGATCCTCTCTGTTCAAAAC  
 CGCACCTACTCTTTTACTCCCCGAGTTCCGACGTGCCCTCGACGAAAGCCTAGAAAGTGACG  
 GACCGAGATGAGGCTGCTCAGAATTTTAAGTTTTCAGTCCAAGACATCATCGACACTGGT  
 TTGTTTATCGCCAGAAACAATGGATTTTGGCAAGGAAACCTCGTTGTTGGCGAGAGATAC  
 TCCCGACGAGATGTCTGCCGAATTCTCAATTGGGAACGAAACAACGAGAGCACGATTTAT  
 GGATACAAAGTGGACAGTTACACATCTACTTGCCCAATCTTTGTGACCTATCACAAGGCT  
 GATGATGTATCCGAAAGTACTCGTTACCAGGATGAACTCGTCGATCCGAATACCCTTCAT  
 TGGTATTCCCGCGGCAACCGAAAGATCACGTCTAATGAGATCAAGCCCATCGCTGCGAAT  
 GCTGTGGATCTTCATGTTTTTGTGAAGAAGGACGATGCCGAAGGCCCTTGATTTCTTCTAC  
 CTTGGTCAAGCGCATTACAGAAAACAGCAAACAGTCATCGATGCCCCGAAACAAAGGAGTT  
 GTGCAACCGGTGGTCACAATGGATCTACAGTTTCGACACACCCGTCGAACAAAGCCTGTTT  
 GAGTACCTGAGCACAAATCTCGCCGTAACGGAG

>RXA00054-downstream  
 TAACCACCGCAACCAAGCGTCTGA

>RXA00056-upstream  
 ATATGAATTTAATAATAGATTCCGAACGAAATCGGTGTTAGCGTCTGTGCTGAAACAATC  
 TAATCGCGTTTCAGGACACCTACATGATCAGGAGCTCTTT

>RXA00056  
 TTGTAAACAGAGTCAGTCGTATTGCAGGCGCTTCTGCAATCACACTATGCATCGGCTTA  
 ACCACAATACTAAGCCCTACTTCCACTGCACAAAGCCTCGAACAGATCACCCCTTTACCT  
 GAATCTGCAATCGACCTCAACGCCGAGATTACGTAACACAAGCGACATTTACAGCTGAA  
 CAGATCCTTGGTGCTCAAGATGAAATCACAACTATGTACGATTCTCATGACCCCTACGAG  
 TACTTCGATACCCCTACCCGACATCGAACAGCGTTCAATAATAGCAGCGCTTAAACGGGAT  
 CCGAGTTCACTCCAACAACGCCAAGAAACCCGTCTCGCGGCACAGTCCGACCCCTACAAA  
 ATTTACATATCAGGCCTCGAAATGCTTTTCATGCATCAATCTAGTTGATGTTGTATCATGC  
 GGGATTGCAAACCAAGCAGCAACCAAAGCAAATAATGAGGCTGTGCGACGATACCCAGGC  
 GATTCCCTTCGCAACGGCAAAGGCGATGCATTTCCGGCATTGCTCATGGAACGCTCTGATG  
 ACGATACGAATCGGGAGCAATGGAGCTGAAAGAATTGCAACAAACCACGAGACAATCGGG  
 GACGGTCCGGCCGATGAAAATGCAATGGACCTATTCAATAATGCACAAGGCCGACAGATC  
 GGAGCCGATTCAATTAATAGTAAGGATGAAACTAGCGCGCTCGCGATATGCGCGCTGTGG  
 ACAAATCTCGGTAGACTAAAACTCTAAAA

>RXA00056-downstream  
 TAAGCAAGGTGCCCTCTGATGCT

>RXA00058-upstream  
 ATCACTAGGCTATCTTCCGGTTCACCTGAAGTTAGTAACACACCCGGTCACAGAAGTTCCG  
 GCTCGTGTAATCTCCGCTTATCTAGCTCAAAGGAATACTT

>RXA00058  
 ATGAAGTTCTTCGGGTTTTATCGTCTTATTGCTTTAATTGCTGGCATTACCGTTTCAGCA  
 TCTATTCTCACATCCGTAGCTACTGCAGCTGAATCTCCAAGTCTTCAAGCGATTACA  
 CCTGCATTCTCTTCATCATCGGCTCCAGAAGCAGACGAGCAAGCAAACACCAGTGAAGCT  
 ACCGCAGACCTGCTTTACGTGGCAGAAAACCAACTACTTATTAAGCTTTCTAACGCCGTC  
 GTCGAAGATGTTAACGGCGAAATCTTAATGAAAGATAATAAGGGCACTCTTCTGGAGAAT  
 TTGACAGCTGAACTTCAAGCCCAACCAGGCTTCTCAATCGAGAAAGTCGATTCCCATACT  
 GCTTTGTTGACCATGAATCCAGATGAGGTGCCAGATTTACAGGACTGGCGATGCGGAGTC  
 GGCGCTTTGTGAGGCGGGTAGCAGGTGTGGTGGCAACTGGTCTAGCTCTCGCCGCTTTG  
 GGAGTTGCCACAGGTGGCACGGGGTTTGTCTGTGCTTGCAGCAGGGGGACTTGCTGGATAT  
 GGCCTGGCGCTGTGCCCAACTGC

>RXA00058-downstream  
 TAAGGAGAAATAATGGGAATTGT

>RXA00059-upstream

CTGGCAGGCGATTGTTCTCTTACTACTTGCCTAGGTACAGGTGGTGCCTATCTGCTGGC  
CGGTGGTGATGTCACTCAAACCTGCCCGACTGGTGTGTGG

>RXA00059

GTGTTGACCGGAATCTTACTGGCTATGGTCTCTACCGCCCTACGAATCCGCTTCGGATCA  
GGGGTAGCTATCGCTGCAACCGTGCTGTGGACAGTTATCTCAATAACCTTGGGCGGAGAT  
GTGCTAGCCGAGACCATGCTCTGGCTTGTAGCAGTACCATCCTGGCCAGAAACAGCGGAT  
ACTACTACCCGCTTCCTTATTGCGATGCTACTGCAGGCAGTTCTTATCACCGGCAGCACT  
ATCTGGGCTATCCGAGAGATCCGGGATTCAGAGCGCCGTGGC

>RXA00059-downstream

TAAGTTCAGCACCTCCGACAACG

>RXA00063-upstream

CCTGGTCATAGGATACTTAGCTCAACCACACGGTCAGGGCCAGCAATTCCTCACGTTTTTA  
CCAACCTCCGTAAGCACACCATCATGGCCTGGTGCGCCGT

>RXA00063

ATGACCGACGGGACTTAGACGCTGATATCTCACCCGCCAGATCGGGTTGATGACCACC  
CGAACCGTGGTCGAAATCGTTGACTACGCCACATGATTGCCCAACAACCTAGAAAGAGCC  
ACGATCATGGAAAACGAGTACCTCAAAGAAATCGCAGCGCTGAAGAAAGAACTCGCGCAC  
TACAAGCAAAAAGACCATCAGAATCAAATGGTGATCGATATCTTGGGAAAAGCTATTGGG  
ACCAGGCCAATCCTGGCGAGGGCTTAGACGAGGAGGACGCCACC

>RXA00063-downstream

TAAACGTGGATGAGCAACGCGCC

>RXA00065-upstream

ATGCTTCTCAGACGCCTCCCTCTCCTTCAAATCCGCCACCGATTCCAGCGTCACTCCCAT  
GCATGCCCAACCGGGACAGATCTTGCCGTGCGTAGGAATT

>RXA00065

ATGGCGAATCTTCCCAAGAGGGTTTTTCTGTGGTGACGGAATTTTGGCGGATCCCCGC  
ATTTGGGGCCCGGAGATTCCGTATGTTTCGTGAAGAAGCAGGTCAAGTAAATGTGGAAGCA  
CCCGACGAGGCTGGCGATCTAGCCCGATTGACGTTGCCTCTGCAGTTGATCCTGCTCACG  
GAGGAAGAGTTTGCCATCGCTCTCAACGAGGGCAGCGACGTATGTTCGAACGAATGGCG  
GAGCAAGAAGTCGATCTTCTGGATCTGAAACGT

>RXA00065-downstream

TAAGACGGTAGGCTCAATTCCGT

>RXA00067-upstream

GGAATCCCGCATGTTGGGCTCCAGTTGGGGACTGACTCTGTTTTTGATCATTTTGACGCC  
AATCATTATTTTCTCACTTTCAGCTAAAAGGACCATGCA

>RXA00067

ATGGTAGACGCTCAGCGCCCCAAAGCAGGCATCTTCGGTAGCCACACAGAAGAAACATGG  
GTGTGGCTCGGTAATGAACTTTTCGACGAGTCCGGCGAGGTTCATCGCCGACGTTTCGCTCC  
GACGTCTCTACGTGGATCGCGAACGACTACTCATCGAATCCACCCCGGCACCATGCGT  
TTTCGTTGCCGCGCAACACTGTCCGGGGGTGAGGTCTATACGATGACTCAGAATTCTTTC  
ACTGTGGGGGATCTCACTGCGGTGTGCGGGCGCCGACGTATTCACTAAAAAGGGTGTCG  
CCGTGGCGTAAAGAACGCTGATCACCACAATGGGGTGGAAAGTGGCGCGGCTTCGCCCG  
ATGACCAGCGGTAAAGTCGAATTCATTGTGGGCACCGCGGCAGCGAGGCGTTGCCGTTTC  
GTGACGCGAGTATTTTGTAGCTGGGCGTGCGTCTTGGTGGATTCGGCCGTGCGCCGGCCG  
AAAATT

>RXA00067-downstream  
TAAAAGCTTTTGTCTATCGACG

>RXA00068-upstream  
GGCTGCTAAACGGCAACCAATAGAGCGATAATTCGCTAAGGCGAATGTAATCGCAGCAAC  
ATATAGCACC GGCTTAACAGCCGGTGCTATTCTGTTTCG

>RXA00068  
ATGACTTCGAAGGATCTGATTGTGACCTCCTATACGTCTTGGGGCAAGCGTTTCAAGAAT  
GACGGGAAGCTTTTATTAACCTACTTCGCAGCACCCTGATAGTGCTGATGAAAAGGTT  
TTAGCCACTTTCCGGTGAAGTTCCAGCAAATCATTTGAAACCACCGCAACGGTTGATGAG  
CAGCAGTGGGAAGCTGCTTTCAGTATTGATGGAACGGCAACTGCCAAGCTTCCTGATGGT  
CGTGTGTTTCAGCGCGAATGTCAGGTGAGAAGACCTTTACCAAGTCCAAGCGGATTGAAATC  
GACATGGACGGCACCGCGATGGCTGCTGTTAATGAAGATAAAAAACAATTGGATTATCGAC  
GATTCTGAAGAGAATAAAGTCGCTCAGTTTACCGGTATGAACAACGGTGTGCGTCGCGCG  
ATTGTGGAGTTTGAGCCTGACGTAGAAGTCACCCAGGAGCAGGAAATTTTCTTGTCGTGG  
GTTGCTCGGAAACTCTGGAATCCCGCATGTTGGGCTCCAGTTGGGGACTGACTCTGTTT  
TTGATCATTTTGACGCCAATCATTTATTTCTCACTTTCAGC

>RXA00068-downstream  
TAAAAGGACCATGCAATGGTAGA

>RXA00071-upstream  
GCTTTTCTATTTTCGAAAAATAGCCTTGTATTTCGAAAAATTTGATCGGGTATGGTGGTTGGT  
AKWRKRSRWGGKAACWAMACGGGGAAAGGGGAAGACACC

>RXA00071  
ATGAGCATCACACACACGTCCAAGCACTCACACAGCACTCAACGCCATCGACAACCAT  
TTGGCCAGCATGCTYGACCATGGTGTACCCAGACCAATACAAGGCCATCGAGCCCGAC  
CTCATCGCCCTAGAACACACCATCAACCACACGCCACCATCGCCGCCCAAACCAACMGCC  
CTCGCCGAACGCACCAAYGCGSCASWCSATTGGCTCCACCCACCTCATCGACTACCTC  
ACCACCACCTTCGGCCTATCTAAAGCACGCGCCACCACCGCATCAATCTCGCCCACTCC  
CTCTACCCCATACCGAAGCCAACTCTGGATCTGGCAACGGCGGTAATGGTGGCAATCCC  
GACGGCGGTCTGATGGTGGCGACTCGGGTGATGACGACTCCGGCGATGATGACCCCGAC  
CCCGAACCGGACAAGCCTGAAGACGGCAAACCTGATAGTGATAAGCCCCGTAGGCCACGG  
ATCAGCGCGGAAAAACACGCCATCATCACCGACGAACCTCGCCGCCCTCAACCCGAATACC  
ACACCCAGCGCCGAGGAACTRCGCAMCCAAGCCCTGAGTCARGCGATCTGGCGCACCCCA  
GAAGACCTCCGCACGTGGCTACGCCACCAGGTCAACACCGCGAACAAAAACAACCCCAAC  
CCCATCACCGCCATGAAAAGGCGCTACCTCTCAGTAGGTAAACCCGATGCCGACAACATG  
GTCCGCATCAGCGCCTCGTGCCCGCAGCCACCGCAGCACTGATCACCGCGAACACCGCA  
CCGTTAACCAAAACGTGGCAACCTCGTGATCTACCAGCAGCAGAAGATATGCGCACCCGC  
GGGCAACGCCATGCGGATGCGTTGCATCACATCATGGAGATCTACAACCACGGTATTGTC  
ACCCAGCTCGTGGTGGAACAGCCAGCATCATCATCTCCATGACCACCGATGATCTTGAC  
GAGATCAACCACGGTGATCATGGCGATGGCAGTCTACTTAACAACCTGTACCCACGAAC  
ACGGGTTACTCATTTGAACCTGGCGGAGATCATGAACCTCATCGCTGCGAAATACGACTTC  
GCTGTGCTCCTCGATGGTGAGACGGGGCAGCCGTTGAACGTCAATAGGATGCAGCGCTCA  
GCGAACCTGACTCAACGCATCGCGTTGTTTGCTTCTGAGTTGGTGTGCTCGGCACCCAAT  
TGTGACAGGCCGAGTTAGAGTGCGAGGTTTCATCATTTAGATCCCTGGATGAGAGGTGGG  
CTGACCAACCTGGTCAATCTCACGCATCAGTGCTTTAATCACCACCCACGCAACGATGAT  
TCCAGGAGTGGGGTCAATGGTAAAGGGTTTATGGACCGCGATCCCGTCACTGGCAGAGTA  
GGTCACTACTCAGCAAGTGGTGAGGGGCCGGTGTTTAACCGGTCGGCTGCTGCTGATCGT  
TCCGGTGGTGCA

>RXA00071-downstream  
TAGTCCAGACGTAAGCATTATGG

>RXA00077-upstream  
CTAAATTGTTTTAACGCGTGAAGCAGTCCCCGCCGATTTATTCGAGGCGGGGACTTTTCG  
CTTTCCGGGATAAAAAATTGCAACGCACTACACTGAGCAGT



>RXA00077

ATGAATGATGAGAATATTCAAAGCTCCAACATATCAGCCATTCCCGAGTTTGTACGATTGG  
 AAACAGATCGAGGTGTCGCTCTTAGATGTCATCGAATCCTCACGCCATTTTCTGATTGG  
 AAAGATAGCACTGATCGTTCTGCGTTAGATGCTGCGCTAGAGAGAGCAAAAAGAGCTGCC  
 GCAGTTGATACCAATGCCATAGAAGGAATCTTCCAACTGATCGCGGTTTTACCCATACA  
 GTTGCAACGCAGGTAGGGGCTTGGGAGCAACAAATGGCGATGAAAGGCAACATGTTAAG  
 CCTGCGTTTGTACGATACTCTAGAAGGCTTTGAGTATGTTCTCGATGCAGTAACTGGTAGA  
 ACTCCAATCTCTCAGCAATGGATTAGAAAATTTGCACGCCGTCATTCTGCGGAGCCAAGAA  
 AGCCACGAGGTTTTTACAGCCGTTGGAGTCCAAAATCAGGCGCTTCAGAAAGGCGAGTAT  
 AAAACTCAGCCAAATAGTCCACAGCGCTCAGATGGATCTGTACATGCATACGCCCCAGTT  
 GAAGATACTCCTGCTGAAATGGCTAGATTTATTTTTCAGAACTTGAATCTAAGGAATCTTA  
 GCAGCCGAGAAGGTTATTCAAGCTGCCTATGCCCACTATGCTTTTCGTATGTATTCATCCT  
 TTTGCAGATGGGAATGGACGAGTTGCACGAGCCTTGGCTAGTGTTTTTCTATACAAAGAT  
 CCTGGTGTCCCTCTCGTAATCTACCAAGATCAACGCAGAGATTACATCCATGCTCTAGAA  
 GCAGCGGACAAGAATAACCCGCTCCTGCTGATTAGATTCTTTGCTGAACGAGTGACCGAT  
 ACTATTAACCTCTATTATCGTTGATCTCACTACCCCGATCGCGGGTAAATCTGGTTCGGCT  
 AAGCTTTCGGATGCGCTACGCCCCACTCGCGTATTACCAGAATTACATGATGCTGCACAT  
 AGGCTCCAAGAAAGTTTTATTTACAGAAAATCCGATCTCGATTGGATGAAGAAGGAAAAAGG  
 AATGGGTTGGAGTTTCTACTTCAACGGATTTTATCGGTTCCCCATTCAATCTGCCAGAG  
 GGCTATAACGCTTTCCCTGATAGCTATTGTCTGACCTTAGCTTTCAATAGCAACTCTCCA  
 AAACAAATCTTCCACCCGCTATCCATAGTAATAGCAGCTCGAGATGGGAAAAGAGCGAGC  
 AGCGACCTCGTGGCAGCTACTTCTATTGGATACAACCTTTCACGCTTACGGACGTGAAGTC  
 GAGCCTGTTGTTACTGAAAGCTTTCGAGAACGTGTGAAAATTTACGCCGACGGGATTGTA  
 GATCACTTCTTAACCGAACTGGCTAAAAAGTTTCAACAGAAT

>RXA00077-downstream

TAAATTAGCCTATCTCGGCTTTTCG

>RXA00079-upstream

GATAGCGCGGATCTTTCCTAGGCTGCCCGCTTGGGCTTCAGGTTTAGCAAGCGGGACGCT  
 TTTCGCTTATCGACGCCAACTCCCTCCATTTGGAATCCCCC

>RXA00079

ATGGGCTTAGTTTACACCGAATTCACCCCAATAAACACCTACGGAATCCTCGACCACGTA  
 GTCACCTTCCCCGACGGAATAAAGTGCTCAACCTTTCCGAGTCATCCCCCACGACACC  
 GGCTCCGAATCATTTTACCGTCCGCCCCAACGAAAATTCGAAGAAGATTGCCAAGCA  
 GTCGCAGCAGACCTCGAAAGGCTGGTCGCACTGGCCGAAAAA

>RXA00079-downstream

TGACCCACAGAATGGTCTCTAA

>RXA00080-upstream

TTGGCAGCGTTCCGCCAGTACGGAATCCAGCCCGGACCACTACTCTTCGATCGCAACCCT  
 GAACTTGCTCGGGCACTTCTTGCCAGCTTCTTTTCATCGCG

>RXA00080

ATGATCGTCCTGCTGTTTATCAACCTGCCGTTTCGCACAGCTGTGGGCAAAGCTCCTGCTC  
 ATTCCAAACCACTACCTCTACTCCGGCATCGCATTGTTCTGTGGCTGGGCATTTACGCC  
 ACCTCCGGCGCAGTGTTTCGACCTGCTCATGCTGCTCGGCATCGGTGTCGTGGCTTTGATC  
 ATGCGTCGCTACGGTTACCCGCTGGCACCGCTGATGATCGGTATGGTTCTTGGACCTTTG  
 GCTGAAACCTCCCTCCGCGACGCACTACTGTCTCGGTTGGCGATTTCTCCATCCTCGTC  
 TCCAGCCCCATCACTGGTCTCTCTACGCAGTGCTCGCCATCTTCATCGCGGTCAGTGTC  
 ATCACTGCAATCCGCGGTGCTCGCAAGCACCTGACTTCTCAGCTCGAAACCATCGACGCT

>RXA00080-downstream

TAAAGTCCCCGTATAGAAACAGG

>RXA00082-upstream

CACTTGAAGGCGAAGAACTCGACCAGTTTGTGTAAGATGAAATTGACCGAATTGATCAGC  
TATTCAAGAAGATGGGCTA

>RXA00082  
GTGAACGTCACTGAACAATCCGGCGAGTCCCATATCGACATCCCGGAATCACACCAGCTG  
CCCGGACCTCGTCCAGTTGGCGAGGGCACTTTCTGGGAAGGCCGCTCCGGGCTCATCATG  
CCCGCAATTCTTACGGCATTTAGTTTGTATTTGCTCATCGGTGTTTTAAACATGGATGTG  
GGCAATGCAGCATTCCCAGGACCTCGATTCTTCCCAACAATCCTCGGCATCGCGGGTTTG  
TTGGTGGCAGTGGCATTGACCATTCAAACCATCAAGTACCCCATGCATCCAGAAAATGAA  
TCTGGCCGAAGCTGGAAATTCACCTCTGATTACGTCTCACTCGCGTGGGCGATCGGTGGC  
TTCTTCGCCTTTGCAGTCTTGCTTCCATATCTTGGCTGGGTCTTGCTGGCTCCTTGTG  
TTCTGGACAATGACCAGGGCTTTCGGTTCCAAACGCCAGGTTCGATGTTCTTGTTCCTC  
CTCATGATGAGCTCCGTGGTCTACCTCGCATTCGATGTGGGCTTGGGACTTAATCTTCCT  
TCCGGACTTTTGGGTGGTGGCTTT

>RXA00082-downstream  
TAATGGATATTTTGTCCCTCTTG

>RXA00083-upstream  
GAAGATACAGGGGCCACGGTGGGGTGGTGAACAAGAGCAGGCACGAGGCCCTGGTAGATA  
CGGATTTCGACCAAGAAAACGTACACCACTCAGGAGCACTC

>RXA00083  
GTGCTTGCCCTTCCATCCTCTATCATCGACCCCTCTGGTGCCAGTTCGCCGCGCTGATC  
CCACCCGTGACCGACACCCACCCACTTCGGTGCCACCGCCACGCATCCCGGACCGGATC  
ATCTTCGACAAGCTCATCCAGGTCTCTCGTCTCGGCGCCTCCTATGCCAAGATCGCCGAC  
ACGACATGCTCGGCCACCACTTGGCGACCCGCGGGACGAGTGATCACCAGCTGGCATC  
TTCGAGCAGCTGGAACAGATCTGTTTGAATTCTACGACCGTATCGTCGGACTCGATCTC

>RXA00083-downstream  
TAAGTTCGGATTGGCTCGAATTG

>RXA00087-upstream  
TCGTCACTCAACAAACGTTTCCCACCCGGAGGTCTCCCCGTGTCTACCGAAATCCACAA  
CGCCCCACCCAAGGCCCCAACTTGGCTTGGCTGGGTGCTC

>RXA00087  
ATGATCGGCGGAATAATCGGCCTCATTTTGTGCGGTGATCATCATGGCCGAAAACTTGCC  
ATCCTCGAGGATCCCGGTCACATCACCAGCTGCGATTTCAATGCAGTCTTAGCTTGTGGC  
GATGTCTATGCGTTCCGGCCAAGCTAACGCGTTCGGCATCCCGAATCCGCTCATCGGCATC  
GCCGGTTTTCGCCGCTGTTCGCCATCATCGGCGCCGGCATCCTCGCGGGCGGCGGGTTCCGC  
GGTTGGTTCTGGTTTCGGCGCCAGGCCGACTCACTTTTGCCATGATGTTCTGCCACTGG  
CTCGCCTACCAATCCATGTCCGTCATCCGCGCGCTCTGCCCTTACTGCATGGGCGTGTGG  
ACCGTATCGATCATCATGTTCGTGCTGGTCACTGCATGGAATGTGAAAACCTTCAGCGGC  
TCCGACAGCACGTTTCGTCAACGCACGTGTACAAATACAAGTGGGTATCGCGATCGTCTGG  
CTGCTGCTCATCGCAGCCGAGCTGTGTGGTCATTCCGCTACATGTTT

>RXA00087-downstream  
TAGGCATTTAAGGCTTTCAGGCC

>RXA00093-upstream  
AAAGAATCGATTCCGGTGCCGAGGCCTCCTTGTCACCCACGAACCCCGCTTCGCCGCGT  
GGGCAGACCGAACAATCATGCTTAGGGATGGTGAAATCCA

>RXA00093  
GTGACCACACTTCTAGCAGCAACCCGCCCCACCTGCGCGATGCCTTTAAACACCCATGG  
CGATCGCTGGCAGCCATCTTGTGGTGGCCGTACCGATGTTCTTGGTGAGTTTCTTTCTT

ACCTATGATCAATCAATCAACAATGCAGCTAGCTATCCTGGTTCCCAGGTACAAGCTCAC  
TATGACGGAGAAGGAGCCTACCAACTCCTCCAAGAAAACCTTCCAGAAGACTTCCACCTG  
GAACTCTTTTGCCAAATGGTTATCCAGAAGTCTCCTTCGGTGATGAAGAAGTCAATTTCTTT  
GTTGTGCAATCAACAAACGTACAACAAGCCTCATTTCCCGCCGATGCACTCGATGTTTTTA  
GGTGCCACAATCGGTGATACCGTGACCATTCACGGCACCCCGGTGGAAGTTCAGTCGATT  
TCTCCCAACAATATCTTATTGCCGAAGGTACTCTGTTTTCTCTTGAGAATTTCTCCGAA  
TCAGAAACTTTTTCCGGCACCTGGTACTTCCCCGGATCGAATTTACCGAAGAAAACCGA  
CAAGCACTAGAAGCAGTTGGCTTTGAAGTTAATGAATATCGGCGCGGCCCATATCCGTC  
GACCCAAATTTGATCCCAAGCTACATCATGGGATTTTTATCGACGACAATTCGCGCGTC  
GTTGCACTCATGCTGATCTCACCAGTATTTACAATTTCCGCCTCAAGGCAAACAGAACT  
TTCGCACTGCTCGCCTCACAGGGTGCCACACCTAGACACATTCGGTGGGCAGTGCTTACA  
TATGGGCTCTTCGCAAGTCTTGTGGGGCATCCATTGGTTTAGTTCTGGGGCAAATAGGC  
ATCTACGGCTGGTGGAAATACACCTATCCTGAATTCCTCCTCACCAACCCCTGGCTAGTT  
CTTGTAGGTTTTTGGGCGCTGGCAATCATCGCTTCAACGATTGCTGCATTCTTACCGGCA  
GTTTTTGTGTCAGTAGATCAAGCATCATCAACGGAATCTACGGAGGAATCTCCGACAAAATC  
ATCCGGTGGAGCCCTCGAATGCTCATCGGGCCAATCGTCTTAATTGCAGCTGCGGTAATC  
GCCTTGTTTATCGGTGACGGAGAGTGGGGAGGCGTCGTCAAGCAATTATGCTTCCTGGCA  
GCCGTCATCGCCCTGCCGGCCTCAGTGCTCGCGGTGTTGTGGGCGCTTGGGCGCCTGCCT  
GGTTTGACATTCAAACTAGCTACGCGCGATATGCTGCGCCGATCAATGCACTCCATTCTCT  
GCGATTGGTGCCTGGCGGAGTGAATTATGCTTGGTACATTTATGCAAACAACCTGGACTT  
GCAACCCCAAGCCAGCGATAGAGAAGCTACCGCCTCGGTGTATCCTGAGGCCGTATCTTA  
CGCGGTGACACACAAATCCCTGGACTCATGGGGCAAAAAATCGATGTATACGGTGATAAC  
CATGGCTTTGGTATCTATGAACTAGATGTAGATTTTTACTCGGCCAACTATGTGCCCGCA  
CTGACCTCATTTTTTGGCGGACAGTTATTGCCACGCCCAAGATTTTAGACATGTTCCGT  
GTCCACGAACAAGCCGACATCTACGCGCCATCAACCTATAATTCCGGGCTGCAAGAATAC  
GCAATATACCCCGCGCATGAAACCTACATGCTAGACACCGCTGCTGTTTTACCGCCGCTG  
TACTCACATGTTTTATTAAGCCCAGAACTTTTGAAGAAATCGGAGGACAAAACAGAAATC  
TTGGGAACAATCGTGCTTCCCCAAGAACTAGATGACCAAACTGTACAAGCAATCAATCGG  
TCAAGAGATGCGCATTTTCAGCCACGACGGCCATAATTCTTCACTTGCTTCCAGTGCTGCA  
CTAACTGCGGTGGCAATTGTGGTCTGTTTCCCTTGTGATCGTGCTGGCTAATCGCAAACTC  
CAACAGCACGCATTGATTGCCATCGGAGCAACACCTGGAACAATCTACAAAGTCAATGCC  
TTAAATGCAGCGTTGCTTGCCCTTGTGCGAGGCATCATGGGCCTTGTCTCCGGATGGATT  
GCAGCGCTGCTGACAGGCACCACTGATGAAATTGTTGATGGAGCAATTTTGAACACGGC  
ACGCTTGAACACATGATGCTGCCGTGGCCTCTGTTGGTAAGCCTCCTCGTTGTGGCGCCG  
CTGGTGTGCGCCGTGATTGGGGCTATAGCTTCTCCATCGGGACGCCACCAAGAAGCATCA  
ATC

>RXA00093-downstream  
TAACCTTGCCGGAGGAACCGAAA

>RXA00096-upstream  
GGGGAACCTGGGGTAAAAGGAGAAAGTATTCATTACCCCAATAACCTACTAGGTGGGGTGG  
ACACGCATAGTCGACAGCCAGACGTGGCAGAATAGTGTGC

>RXA00096  
ATGACTAATGCAGGTGACAACCTTCGAGATCAGGATGCCTTCTGGCACGGATGACCCATTG  
TCCGATGCGGAGATCCAAAAGTATCGCGAGGAGATCAACCGCTTGGACCGCGAAATCCTC  
GATGCGGTGAAACGCCGCACGAAGATTTCCCAAACCATCGGAAAAACACGCATGAGCTCG  
GGCGGAACACGTCTCGTGACACCCGAGAAGTAGCAATCATCAACCAGTTCCGTGAAGAG  
ATCGGCGAGGAAGGCCCTGCCCTCGCTGGAATTTTGTGCTGCGCATGGGACGCGGAAAACCTC  
GGA

>RXA00096-downstream  
TAAGTTATCCACAGGTAGAAAAA

>RXA00097-upstream  
TTGATGGGCAGAGTTATCCACAGGTTTTTAGCGAGCTGGTTTCCGACGAAGAAAATAGTG  
GATAGGTTACAGGGCAGAATCCCGAATGGAGGTGCCTTCC

>RXA00097

TTGTTTACCAACTTCTTCGCAGTCAACAACCCAGACAGTCCGCCCCGACGACAAAAAACC  
 AAATCAGAGAACTGGAACACCGCTTCTGGCAAGAACACCTGCCAGGCGACGACGATGAC  
 CATTCACCGCAATCTCCAGCCTCGCCATCGTACAGGTCTAACAAAAGCGCAGGTCTCC  
 CGCATATCCATCGCGTTTGCCACGCTCGCCGACTTGCCCGAACTCAAAGCCCTGCAACAA  
 AAGCTGTACCACCTCGACCTCTCCCGACTGATCACCATTAGCAACGAACTCGCCGGCATC  
 AACCCCGACAACCTCGCCGGCGCCGACGCAATCCTCACCGAATACCTCACCGCCACCAGC  
 CCCAACAGATTCTGCCAAGCCCGGCGTCCATAGGACGCAAGATAAAAGAAATAAGAGAT  
 TTGCTTGACGACGCAAGAGCCACCGGTTTCGCGCGGTACCCAAGACGACAGCTCTTTTCGGA  
 GTGACCTTCTCCCCAGACGGAACCGCCGAAATCGGAGCCTCCGTCGATGCTGTGGACGGG  
 CACATCATCAACGACGCCGTACCCAACACGCGAAGAAAAACGACCTCACCTACGGCGAA  
 GCTTTCAGCGACATCCTTCGGAACAATATCCAAGTCAAGGTAGTCTCAACTTGTACACC  
 GCCAAAGACCTCGCCAACGCCCCAGTGTGGGCCAGCGGAATCGGCTGGTTGGATGCCAAG  
 ACTGGAACATTCTGGTCAGAGAAAGCCAACAAAGAACAAGACATGGATGCGGCTGCCAAA  
 ATCAGCACCGACAAACACGATCCTCCACCAGCGTTGCGTGACGCACTCATTGGTCGTGAT  
 GGCACCTGCCGATTCCCTGGCTGTTTCAGTCCCAGCGCTCAAACCCAAGCCGACCACCGC  
 ATCCCTTACGAAGAAGGCGGAGAACTTGCCTAGGCGGAATCGGCTGCCTCTGTCAACAC  
 CACCACAACATGAAAACCGACGCGCGAGTCACCTACCTTCTCGATCCCTTCTCCGGCATC  
 ATCGTCTGGCTCATGGGAGACGGAACATGGGCACTGTGAGAACCCAACGGGCCGCTCAAT  
 CCCAAAATGCGAGATGGGCGCAACAGTCGCCCAACACCGGGCACGCCACCACAAGCGT  
 TGGGTTAAGGAGGACGCCAAG

>RXA00097-downstream

TAGCCGGATGGCCACGTCGAAAA

>RXA00101-upstream

TAAACCGTGCAGGAGATGCCGAACCCCAATCGTGAAAGCCGAGTTGGGGGAGCGAATAAT  
 CTGGTGGTGTCCGCGCTGCCAACCGCTAAATCTCGTGAAGC

>RXA00101

ATGAGACTAATACTCAACCTGATTTGGTTATTCTTCGGTGGCATTTTGGCTCGCGTTGGGA  
 TACGTATTCTTCGGAATCATCGCATGTATCTTCATCGTGACGATTCCCGCCGGTATCGCA  
 AGCTTCCGCATGGCTAACTACGCGCTGTGGCCGTTTGGTAGGACGGTTGTTTCGTAATCCT  
 AAAGCCGGAGGGTTTTCTGCCCTGAGCAACGGACTGTGGTTTATCATTGCTGGACTGTGG  
 CTGGCGATCGGGCACCTCACCACCGCGGCTGCCCAGGCGATCACCATCATCGGAATTCCA  
 CTGGCGATCGCAAACATCCGAATGATCCCCGTGACGTGTTTCCCGTTTCGGCAAAGAAATC  
 TATGACAGCAACCGCATTCCTTCGGCTACGAACCGATGGTTAAGTTT

>RXA00101-downstream

TAATTCGGCGACGGACTAAACCA

>RXA00108-upstream

GAATTGGGTTTTGAGCATCGTGCGGTGCTTGTGTTGCAAGTGCCATCGTCATGATGAT  
 TGCAAAGAATCGTAACCAGAAATAAGAGGGTTTATTACC

>RXA00108

ATGAAGAAGTTTTTGTTCGCAGGTGCTGTACTGAGCAGTGCGTTGGTTATGGCGGCGTGT  
 TCGCCTGCTAATCAAAGTGATTCCACCTCCACGAGCGTGGAGACTACTTCTCCAGCAGC  
 ACGCAGGTAAGCGATGCTGTGATCACCACGGAACGCTGTTGTTTCGTGCGTCTGTGGAG  
 GACAGCGACATGACGGCAGTGTTTCGCTACGTTGGTGAACAATCTGATGATGAGATCAAC  
 GTTTCTGGCTTTACTGCTGATGTTGATGCTGCCAGCTTTGAGGTCCATGAGGTTGTTGAT  
 GGCGTCATGCAGGAAAAGCCAGGTGGTTTTGTGATCCCTGCAGGGGAGAGCATCGAGCTG  
 GCACCAGGTGGCGATCATTTGATGATCATGGGGCTTGCGAACCCAATCGAGGCTGGCGAT  
 GAAGTGACGGTCACTCTGAATTGGCTGATGGTTCTGAAGTTAAGCTTGATCCGATCCCG  
 GCGCGCACCATTGCTGCTGGTGATGAGGATTATGGCGATCTGGGAAGTGAAGGCCACGAG  
 GGC

>RXA00110-upstream

ATATCGAATGTCCAGTCACGCTAAACTTCACCCAAGATGAGATTTTCGTGGCAGCATTTGGG  
AATAACGAACGCTAATTTTAAACACTGGAGGAGCTTCCAC

>RXA00110

GTGAGCAACAAAGACGGCCTTTTACTGACGGTAACAGCACGTTTGACCTAAGGTGGAT  
TCAATTCCCCTCAGCGATGTGGATACCAGCGTTAGCGGTGAAGCCTCCATCGGCACGCTG  
ATCTCCAACGCAACCTCCCAAATGTCCAGCCTTTTCCGCGCAGAAGTTGAGCTGGCGAAG  
ACTGAACCTCGCAGGCGAAGCCAAGAAAGCTGCCATCGGCGGGCGGCATTCAGCGTTGCT  
GGCGTAATCGCACTGTACAGCTCCTTCTTTCTTTTCTTCTTCGTGCGCAGCACTGCTGAGC  
GAGTGGATTAAGCCTTGGGCAGCATTCCTCATCGTGTTCCTCTTCATGCTGGTCATCGCC  
GCAGCTCTCGCACTGTTTCGGCTGGCGCAAGGTGAAGAAGATGGGCGCTCCGAAGAACC  
ATCCAATCGGTCAACCAACTGAAGAACCCTGGTCCCAGGTGAGGCATCCGAGAAGCTGGAG  
AAGGCCAACAAGCGTGGCCTCTACACCTCCGCGTCTTCCACAGCCCCGGCGCCATCACT  
GGCGACCAC

>RXA00110-downstream

TAAAAAAGGAGACTTCGATGGCC

>RXA00114-upstream

TGCATTCCCTAACGGGAATGCAGCTTTTTGTGTTCCTAGTGCAAATCGAAATCTCATGTG  
ATTTACTTAAACCTAATTAAATCTACTATCGGAGATCTC

>RXA00114

ATGAACTTCTCAAGTTTGCTGCAGCAGGAACCTTCGCACTAGCCCTGGCTGGCTGCACA  
CAGACTGAGTCTCTCGTAGCAACAATCGAATCTGCAACCTCTGCAGCACAGGCATCCGGA  
AACGACGTAGAAGGAGACCAAACTCCGCGTTTCAACTCTCCGTGGCGAATGCTTCAAC  
GACACCTACGAAGAAGAAATCTCCGAAGTACCCATCGTTCGACTGCGCAGAACCCTCACGAC  
AACGAGATCTACTACCTCTACGACATCGAAGGCGACGACTTCCCAACCGACATCACCACC  
ACAGGCTACGAAGGCTGCCTCCCAACATTTGAAGGCTTCGTAGGAGCTCCTTACGAAACC  
TCCATCTACGAGGTCTACCCAATGACCCCAACCTTTGGCTCCTGGACAAACGGCGACCGC  
GAGGTAGTGTGCTCCGTGTACTTGGCCACCGGTGAGCAGATGACCGGAACCGCAGCAGGA  
ACCGCGCAG

>RXA00114-downstream

TAGATTTTGGATAGGGAATTTTG

>RXA00117-upstream

GTTGATCCCACAGTATACCCCCACCCCTATCTTGAATACCCCCAGGGTATATGGCACAC  
TTGGAATCGCCCATCACTTTGAGATTGAAAAGGACAAGGT

>RXA00117

ATGACTTCCGCTCAACCGATTACTTCCGTAGATGCACAGACTCTAAAATCGTGGATCGAT  
AAGCATGAAGGACTCACCGTCATTGACGTCCGCACTGCACATGAGTTTTCAAATTTGCAC  
ATTAAAGGCTCTTACAACGTGCCCTCTAACTACACTTGCTGAGCATTCGGAAGAGATTTCC  
TCTCGTGTGGAGAACATGTTGTTTTGGTGTGTCAATCCGGCATTCGAGCAGGTCAGGCA  
CAACAAAAGCTGGCACCTTTGGGAATTTCCACCGTGGCTGTTTTGGAGGGTGGCATCAAT  
AGTTTTGCTAAGGCTGACGGTGATGTGGTCCGCGGAACCCAGGTGTGGGATATCGAACGT  
CAGGTGCGTTTTTGCCGCTGGATCATTTGGTGCTCGCAGGGCTTGCGGGAGGTAAATTCCTT  
TCACCAAAAAGTTTCGCACCTGTCCGGAATTATTGGTGCGGGTCTGACATTTTCTGGCGTT  
TCCAACACCTGTGCCATGGGCAAAGCTCTGTCCGCTTGCCGTGGAATAAACTAAGCCA  
GTTCTTACCGAAACCGAGACATTGAGCAAGCTTCCAAGCCCTAAGGAGAAC

>RXA00117-downstream

TAAATGTCTATCACCATTACTGA

>RXA00118-upstream

ATGGGCGATTCCAAGTGTGCCATATACCCTGGGGGGTATTCAAGATAGGGGTGGGGGTAT  
ACTGTGGGATCAACGTTCCAGGGCAACAAAAGGAGAAAAA

>RXA00118

ATGCAACTCAATCCTGATGAGATCACCCAGTGCTCAACCGACTCAAGCGCGCCCAAGGT  
CAACTCACC GGAGTAATCCGAATGCTTGATGAAGGCGAAGACTGTAAAGCCGTAGTCACC  
CAACTTGCCGCGAGTCACAAAAGCGCTGGACAGGGCAGGCTTCGCCATCATTGCCACAGGT  
TTGGAACAGTGCCTCACCAACCCTGATGCGGACATGGACAAAAAGGAAGTAGAAAAACTG  
TTCTGTGCTGGCT

>RXA00118-downstream

TAACTATGGCCTAGTTCAGGGCG

>RXA00119-upstream

ACTAATGAGAAGCTGTTTTTCAATTGGTGCAGGATTTCCACAAGGAAGCTAGGGGAGAGGG  
GCTTCCAATCAAGTGGGGTCCATCGCGTGAGAAATTTGGC

>RXA00119

ATGCTGGAGTTTCTGCAGATGTCATTCCCGAGAACATCAAACACATTGCGCAGACAAAG  
TTCCAGACTGAAGCAACTTCGGTGGAGGATATTCGTCGTGCGATTAACTGCTGAGTGAT  
CAGGCGGAGCGTGCGGTGCGTCTTTAATCCTGGTTTCATTCTTGCGCAGGTGGGCTCC  
ACCATCGTGGAGGTTTATGGCGGTGCTCCGGTTGCTTGGCTGGATGCGGTTGAGCTGTTG  
ATTAGTCTGATGTGGAGTGGGTTGGGGTTCATGGCTCAAGGAAGCTCGATATTAATGTC  
AGCGGAGAATTGTCCGGGGTGATTTCTGCTGGTGACAAGTTGGGTGAAGTGGCTTGCGGAT  
GATTGGACAATCAACATTGTTACCGGCGAGTACAAAATCCAGATCGAAGATGCTCGACCA  
AGTACTGCATTCTTGCGGACGCGACTGAAGTGAATTAATCAGGCAAACCTCTGAGATTGTT  
CCGTTCCATGTTCCGATGCTCAGCAACTCGAAAATTGTGATGTCTGGCTTTAGTGATTAT  
TCACTAGCGGGTGATGCGATTACATCTGCGGGAAAAGTGGCTGAATTGGCGAGGCCCTTT  
GCCCCACTGGAAAGAAAACGTCATTCTTACGATAGAAATAGCCATGGACTATGAACCATCA  
CCGGTGGCAGATCTTTGGCAGGGAGATTCTTCGGAGACACCTGAGCCTTTTCGACGATTTT  
GAGCGCTTATTGCGGGAAGAAATGCTTATTCCTGAGATT

>RXA00119-downstream

TAGCTGGTCATAGACCTGCTGTT

>RXA00120-upstream

AATCAAATACTTGATTACAGAGCAAGATGTACCTGCACTCCGCGAGCAGTTGGCAACGAG  
GATGAGCACGGATCCGCTTTCCCCACCCGGAGGCTACCGA

>RXA00120

GTGGAATCCCTTTACTTCGATTACGCCGATTTACGGTGCTACACCGAAAAGATCGAGGGT  
CTGAAATTCCGAAGGAAACTACGGATCCGTACCTACGGTGATGGAGTGCTCACTCCAGAA  
TCCACCGTGTCGGTAGAGATCAAGCAGCGGGTTAACAAAGTAAGTCAAAAGCGTCGGCTG  
GATTTGCCCTTTATATATGCGCTCGCCCTGGGCGATAGCACGGGCGCCGCGGTAGGCGAG  
CAGGTGGACGTCGAGAAGCTTCTTGAAATCTCTCCGGAAAACCAGCACGCTTTGATTAC  
GAAATGGCGTCGTTTGCTAAAAATATCGGCTGCGACCCATCGCCACCACGAAGTATCAC  
CGCGAGGCATTCTGTCGGCGCTGATGCGGAGGAAAGTTCCGCGAGTCAACATTGACCACGGT  
GTTTCAGGCCGTGATCGTGATTTCTGCTTGCCCAAGACCTTGAAGACCGCCCAACGGTG  
GCGCAAGGATTGGCAGTCGTGGAAATCAAATGCGATGAACGCGTGCCGTTTGGCTCACT  
GATATGACTGCTCAACTGGAAATGTCCGTGATTCCGATGTCCAAATACTGCGAAACCATC  
GAAGCGTTTACAACCGTCCGGCATCAGCTTTCGGCGCTGTCGACCCCATCTTC

>RXA00120-downstream

TAAACAAGAAAGGCCCTCCAAT

>RXA00121-upstream

GATGTCAAATACTGCGAAACCATCGAAGCGTTTCAACAACCGTCCGGCATCAGCTTTCGG  
CGCTGTGACCCCATCTTCTAAACAAGAAAGGCCCTCCA

>RXA00121

ATGTTGAGCGATCTGAGCTCCATTTTTGACTTCCAAGACCTCTCCGGCACCTTCTCTGTC

GTCGACGTTCTCATCACTTTGGTCTTGTCTTCGTCCTGACCTCCATCGTGGGTGTGGTG  
TACCAAAAGACCCACCGCCACATCTCCTACAGCCAGTCATTTCGTACAAACGTTGGTGCTG  
GTGGGAATGGTCATTGCAATCATCATGCTGGTGGTCCGGCTCCAACATTGCACGTGCATTC  
GCCCCTGGTTGGCGCGCTTTCCGGTGATTCGATTCCGCAACGCAGTGAAAGAAACCCGAGAT  
GTGGGCTTCCTTTTCCCTTGCCATGGCAATCGGCATGACTTGCGGTACCCGCTTCTACGTT  
CTGGCGATCGCTGCAACCATCGTTGTCTGTGGCGTTCTGTTTCATCATGTACCGCTTCGAC  
TGGTTC AAGGCTGATATCCAGCGCCAGGTCATCAAGGTGCAGGTCCAGCCGATGGACAA  
GCTGATTCCGGCAGGTCCTACGCAGAAGAAGTTGAACTGATCCTCGCACAGTACTGCACT  
TCCTTTGAGATGATGTCCGCTGAATCTGTCCGCGGCGGAGCCCTGACCGAGTTCTCCTAC  
ACCGCTCAAATGCGCAAGAACGTGAAGCCACATGAGCTGGTCGCCAAGATGCGCGATGTG  
AACTACGGCCAAAAGCGACTGTCTTGACCGGTCACGATCAAACGGATGTA

>RXA00121-downstream  
TAGAAAATGCCTAGCTTTAAATC

>RXA00122-upstream  
GATGCGCGATGTGAACTACGGCCAAAAGCGACTGTCTTGACCGGTCACGATCAAACGGA  
TGTATAGAAAATGCCTAGCTTTAAATCTGCTCGATGGAGG

>RXA00122  
ATGAACAGACGCCTCTTCTAGGAACTTCCGCAGCTATCATCGCTGTCCGGTGGCGTGCTC  
GGTGGAGTGCAAGTTGTACCTTATATTTCCTCTGGTGAAATCCAAACGTCAGCATCATCG  
ACTGCCACGATCGATGTCCGGTGCAGGCAATGTCGATATTTTTGATACCTCCGTTTCCCAT  
GAAATCAGCCTGCAGGTTTTCGCAGGAAAGCCTCGATGAGATGCTCGCGGACTATCAAGAA  
GACGGTTCCAAAACCTGGGTGAAAGCAACCATCACGATTGATGGCGTGACCATGAAAAC  
GTCGGCATCCGCCTCAAGGGCAACTCCACGCTGTCCGGGTTGGGTGCAACATCTGAAGAA  
GGCGGACCTCAGGCACCAGAAGGCGTCGAAGAGTTTACAGATCTCAGTGAAGAGGAAATC  
GCCCAGTTTGAGGAACAGTTTCGCGGCGCAGCAAGAGACTACTGACGCTTCAGAGACCGGT  
GAAACTGCGGAAAATGAAGAGACTCGCGGCCCGGCGGTGGCATGGGTGGTGGCGGCATG  
GGTGGCATGACTTCGGTTCGATGCCGACGATGTGTCAGCACCTGGCCACTTCTGATCAGCTTC  
GACAAATACGAAGACGGCCGCTCTACCAAGGCATGACCCAATGGCACTACGCCCCGGC  
ACCACCGTGGTCAACGAAGCAATGGCGCTGGCCCTGACCGCAGAAACCGGCCAGGTCTCG  
CAGCAATCCAGCTTCACAACGTTTTCGCTTAACGACGAGCCCTCCACCACTCGACTCCTT  
TTGAAGCACCCCGATGAAAATTATGCCGACGCGCTCGGCAACGGAGTCCCTCTCAAAGCA  
GATTCCAACAGTTCTTACCTACCAAGGCGAAGACCAAATGAATACGACGGACAGTTC  
AAGCAGATCAACGGTGACGGCAACGGAGACATCCAACCGATCATCAACCTGCTGAAATGG  
CTCGACACCGCAAGCGATGAAGAGTTTGTGTAACACCTCTCTGACTACGTCGATGTGGAA  
AGCTTTGCTCGCTACGTTGCCACTCAAACCTGTTGGTAAATTCCGACGACATGGCTGGT  
CCCGGTAGTAATTACTACCTGTGGTACGACTACGACACCGGCCTGATCAGCGTGATCTCT  
TGGGATTTGAACCTCGCAATGTCCGGCTCAACTGATGCTGGCCCAGATGATGAAATCTCC  
ATGGGCGGAGGTGGCGGTGGCGGAATGCGTCTGGTGGAACGACCGACACTGAAATTGAA  
GGTACTGCGACCGAGGATATGCCCTGACATGGGCAATATGCAGCAACGTGAACGCCCTGAA  
GGAATGCCAGACATGGGTGAGATGCCCTGATATGGGTGACCGGGAAGGCGGTGGATCGATG  
GGAGGAAACCAGCTCAAGGAACGTTTCTCGCTTCCGATGCATTCACGGAAATCTATGAG  
CAGGTGTACTGGGAGCTGTATGAAGAAATGTATGGTTCCGGAACCTGCCATCGAGTTGTTG  
GATGAGATTGCAGCGTCAATTCCAGAACTGATGCGGTGACTGCAGATGAGATCGCTACG  
GAAGTGGCGTCAATGCGGGAATGGATCACTGCCCGCACAGAAGCGTTGGCTGCTTTGCAA  
GAG

>RXA00122-downstream  
TGATCAAACCTAGAAAACCAACAA

>RXA00127-upstream  
TTGTGGGGCGCCGGGGCGTTCGTTATGCAGTGAAGTCCAGCGTGTGTGGAGGAAGCCGCC  
AACATTGGCGCGGCTTGATTTAGATTTACCGGTGTGGACG

>RXA00127  
TTGTGCGCGTATGACGGCCCGCATCGCAACGTGCTCATTGCGCTGAAGGAGCACGGCCGT  
GCAGACCTTGTGGCGTTTGTGGGCGCGGTGGTGGGGCGTCGATAAGCTATCTGGCGGCT

CAGGGGGAAATTGAGCACGACATCACGCTGGTTCCGGCGCCACCCGCGCCACCTCGCGA  
CGCCGGCGGGGCGGCGATCCGGTTGAGCGGGTGTGCAATGCATCACGCTTATCGACGTTT  
CCCTGCGCTTCAAATCTCATCCCGCACACCAGACTCCGTCGGTCAAACCTGCGCAACAGCGA  
AGACTCAATATGCGAGTGGAGTTAGTCCGACAACCTCGGGGTTCTGTCTTGATCATCGAC  
GATGTGGTAACAACGGGGGCAACTATTTCCGCATCTGCAAACGTTCTTCGCGCAGCGGGT  
GTGCAGGTCAGAGGAGCTTTAACTTATTGCCAAGCG

>RXA00127-downstream  
TGATCTTGGATATAAAAGGGGCC

>RXA00128-upstream  
CCATTTTCCGTTTGGTCTTGCCTAAAGAACCGCATGGAAATTATCGTGAAGCACCGATCC  
CGTTGATCGCTCCAGAGACACCGTGGAAGGGGAGCAGCA

>RXA00128  
GTGAGTAAAATTTTCGACGAAACTGAAGGCCCTCACCGCGGTGCTGTCTGTGACCACTCTG  
GTGGCTGGGTGTTCCACGCTTCCGCGAACACGGATCCGCAAGTGCTGCGCTCATTTTCC  
GGGTCCCAAAGCACACAAGAGATAGCAGGGCCGACCCCGAATCAAGATCCGGATTTGTTG  
ATCCGCGGCTTCTTCAGCGCAGGTGCGTATCCGACTCAGCAGTATGAAGCGGCGAAGGCG  
TATCTGACGGAAGGACGCGCAGCACGTGGAATCCGGCTGCGTCACTCGTATTTTGGAT  
CGCATGTATCTGAACACTCTGCCAGGTTTCGACGAATGCGGAACGAACGATTGCGATCCGT  
GGAACCGCAGGTGCGAACGTTGCTCAGCGGTGGCGTGTATCAGCCGGAGAATGCGGAGTTT  
GAAGCTGAGATCACGATGCGTCGGGAAGATGGGGAGTGGCGTATCGATGCTTTGCCGGAC  
GGGATTTTATTAGAGAGAAACGATCTGCGGAACCATTAACACTCCGCACGATGTGTATTTT  
TTTGATCCTTCTGCGCAGGTGTTGGTGGGGGATCGGCGTTGGTTGTTCAATGAGTCGCAG  
TCGATGTCCACGGTGCTGATGGCCCTTCTGGTTAATGGTCCTTCGCCGGCAATTTCTCCT  
GGTGTGGTCAATCAGCTGTCCACGGATGCGTCGTTTCGTGGGGTTCAATGATGGGGAGTAT  
CAGTTCACTGGTTTGGGAAATTTGGATGATGATGCGCGTTTTCGCTTCGCCGCCAGGCC  
GTGTGGACGTTGGCGCATGCTGATGTGCGAGGCCCTACACTTTGGTCGCTGACGGCGCG  
CCGTTGCTGTGCGAGTTCCCAACGCTCACACCGATGACCTCGCCGAATACAACCCAGAG  
GCTTACACCAACACGGTGTCCACGTTGTTTGCCTTGACAGGATGGATCGTTGTGAGGGTC  
AGTTCCGGCAATGTGAGTCCACTACAGGGCATTGAGAGCGGTGGAGATATCGATTCTGCA  
GCGATTTCTCTCCGCCAATGTGGTGGCAGCGGTACGCCACGAAAACAACGAGGCAGTG  
CTTACTGTTGGCTCCATGGAAGGCGTGACTTCAGATGCGTTGAGGAGTGAACGATCACT  
CGTCCACCTTTGAATACGCGTCGAGTGGGTGTTGGGCTGTGGTGGATGGGGAGACGCT  
GTCCGAGTCGCACGATCGGCAACAACCGGTGAGCTCGTCCAGACGGAGGCGGAGATTGTG  
CTGCCAAGGGATGTGACGGGTCCGATCTCTGAATTCCAACCTGTCACGAACGCGGTCCG  
GCCGCCATGATCATTTGAAGGCAAGGTGTACGTGGGCGTCGTAACGCGTCTTGGTCCGGC  
GAGCGGCGCGTGACAAATATCACGGAGGTGGCGCCGAGCTTGGGCGAGGCGGCGCTGTG  
ATCAACTGGCGCCAGACGGCATTTTGCTTGTGGGCACGTCAATTCAGAGACGCGCTG  
TGGCGCGTCGAGCAGGACGGATCGGCGATTTTCGTGATGCGGAGCGGGAATCTCAGCGCG  
CCGGTGGTGGCGGTGGCAAGTTCCGCGACGACGGTCTACGTCATGATTTCGCATGCGATG  
CTTCAGCTGCCGACTGCCGATAATGATATTTGGCGCGAGGTGCCCGGTTTGTGGGCACG  
CGTGCGGCGCCGGTGGTTGCGTAC

>RXA00128-downstream  
TGATGGAGCTGTTCTTCCGCGC

>RXA00134-upstream  
GCAGCTGTGCTCCACAGTGACTAAAACTTGTCTTTCACGTGCCCCACCTTATCCGTGT  
TCCCCACCCCTGTGCGTAACGACAGCTAGAATCTCAAGTT

>RXA00134  
ATGGCCGTTTCATTTAAACCAAGATCTATACGCGAACCGGGGACGATGGAACCACGGGGCTC  
TCAAATTTTGAGCGAGTTCCCAAGGACGATCCCCGCTTATTGCATACGCCGACTCCGAT  
GAAGCAAACTGTGCGATTGGCCAAGTGCTTGCCTCAGCAGCCCTACGGAAGATATGGCA  
ACCTTATTGCGGACTATTCAAATGAACTTTTGATGTGGGCGCAGACTTAGCAACCCCG  
ATTGAGGAGAAATCCGAAGTATCCCCACTTCGAGTTCTTCCGGAATATATCGAACGACTT  
GAGAAGGAGTGCGATAAATGGAACGAGGATGTGCCGGCGTTGGATTTCCTTCATTTGCCG



GGTGGCACGCCAGCAGCGGCACTCTTGACACCCGCAAGGGTAATTACGAGGCGCGCGGAG  
AGAGCAGCTTGGATAGCGGTGCGGGAATTTCCGAGCACCACCTCTACCTTGCCAGCCCAA  
TACCTGAATCGTCTTAGCGATCTGCTGTTTATTTCTTTCCCGTGTTGCCAACAAATGGCAAT  
GATGTGAAGTGGGTTCGGGGCGGAAAAAGA

>RXA00134-downstream  
TGAAAACCAACCCTGCGACCGTGA

>RXA00140-upstream  
CTCAACGATATTACGCTTTCCGCAATGCTGAAAAACGCCATCGATCACGTCTCGCGATT  
CAAGATGCCGTAGCCAATGCAGGCAAGGAAATCGGCTAAC

>RXA00140  
ATGTCGGACGAGTCCATCGAAGAGCAGGAAAAAGAACTCGCGGCGCTGAAGGCTCAAATC  
GATGAACTGGAAAAGAAAGACAAGCAGAACAAGCTAATCATCGAGATTTTGTCCAAGGCC  
GTCGAAAAGAATGTGGCAGAGGCAGAAGCGAAAAGAGCCCGCAAATATCCGCCCAATCCC  
CTGTGG

>RXA00140-downstream  
TGAATTCTAAGGCGTCGAACCTT

>RXA00141-upstream  
GTCGGCTCTACGTTATGAGCTCCATCGAATCCGCTGTTTACGTGCTTCGAATGGCTTGAG  
CAGCAATTCCCAGATCTAGTCACCTGGAAGGACGAACACC

>RXA00141  
ATGACCACTGATTCCAATTCTGCGACAATCCCAACCCCAAAGCCGATTCCAGTGACCATC  
GACCGAATCTCCCTCATCATGAAAGAATTTCGGCATTGACCTATCCATCGCCGATGAACAA  
GGCACCGGATCCCAAGTAGCCAGCGCCAACCTCAACGGCCATCACGTCATGTTGCTGTG  
ATCGGTTTCAGTCTGATCGTTGCGGCCGATCGCGCCACCGAAATGCCAGTCTCCGACGGC  
AACCCCGCATGGCATCTCGCTGCAACCAAGTCAACTGTTTCAACTTCGCTGCCAAGGCT  
GTCGTAGTTGATCGCACCGACAACATCGTGATCCGCGCCGAGAAGGATGTCCCATCGCC  
GCTGGGCTCAACGATATTACGCTTTCCGCAATGCTGAAAAACGCCATCGATCACGTCTC  
GCGATTCAAGATGCCGTAGCCAATGCAGGCAAGGAAATCGGC

>RXA00141-downstream  
TAACATGTCGGACGAGTCCATCG

>RXA00142-upstream  
ATCCTCAATTTCCGCCGTAAGCGCAACGACTAAAACCACCATCTGTAGTGTGGTGAAAA  
GTTACTTTTAAAGGATTTTGGAAGGACTGAAACTCCCCA

>RXA00142  
GTGCCTCAATCACCCACAGCACACGACCCCAACGACATCCAGGAATTTAACCCTCGATGCC  
GTTGCAGGGATTCTCCAGGACGAAAAACTGGACTACCGCATCGATGAACACGACGGCGAA  
AAAGTAATCCGCACCGGATTTCATCAACGCCGCCATCAGCTTCATCCTCTTAGACGGCAGC  
TTAACCATGGAAGCCATGTGGCGAGGAGCCCCCTCCACCGATGCTGCCGCACAAGTTCTC  
GCGGCCACCAACGAATGGAACCTCACCCAGTTTCGACCCACCATTCGATTCTTCGAACTC  
AACGAAGGCACCTCGCCATCAATGCACTGCGACACGTCGTTGTTTCCGCAGGCATGAGC  
CACAACCAAGTCGGCTCCTACGTTATGAGCTCCATCGAATCCGCTGTTTACGTGCTTCGAA  
TGGCTTGAGCAGCAATTCACGATCTAGTCACCTGGAAGGACGAACACCATGACCAC

>RXA00142-downstream  
TGATTCCAATTCTGCGACAATCC

>RXA00150-upstream

AGCTGAGCAGGGATCGGCACTAGCTTCTACTACGATAACGAGAACTTTGTTTCAATACAT  
TCAAAATGGCGGAATATTTTGATCACGGGGGTGCAACTGT

>RXA00150

ATGGTGTTTTCTATGCATGACAAAGGTGAGACCCAGGAGAATCCTGCGGACATGTCAGGA  
CGCCTAAACACACCAATTTCCACGGTCTTTCACTTCTTTAGCTCACTTTCCATGACGCT  
CTGCGCAGTGTGGCCAGTGGAGTGCCTGGAAGAAAATCGCTGTATCGGTTGTCATCGTC  
GCAATTATTTCCGTAACCTTTCTTGTCGATGTCCCCCGATTTCGGTTTATCGTGACTGG  
GCAAACAACGCCGGCGACGCTTTTGTCTTAGTTTTTGGCGCTTTTATATCCTCATTACT  
CAGTTCCTATCCCCCGACAGTTCTCACACTGGCCTCCGGCGTGCTGTTCCGGGCCGGTT  
CTTGGATCAGTCGTGGCGCTGGGTTCACCACAGTGTACGCGTAATCTCGCTCCTCATT  
GTTCCGGGGTCTGCTTGGCGATTGGATGGCGCCACGTTTAACGCACCCCGCAGTCTCACGC  
ATCAATACCCGACTTGAGCAACGTGGATGGCTGGCGATTACCTCTTTAAGAAATGATCGCC  
GCTATCCCTTTTCCATCCTCAACTATGTTGCAGCCTTGACTAGCGTTCCTGTTTTTCT  
TTTGCCATCGCTACCTTGATCGGATCTGCACCAGGAACCATCGTCACCGTCGTTTTGGGA  
GATGCAGTCACAGGTTCTGGAACCTGGACTGCCGTTGCATTACGGTATTTTTAGCGATT  
TTGGGTGTTTTAGGTATCTTTTAGATCAAAAGATGCCAGTCAAGCCTGGAAAG

>RXA00150-downstream

TAGACAATATAAGGTAGGGTTGG

>RXA00151-upstream

AAGTAGACAATATAAGGTAGGGTTGGAGAAGATTCTTTACTTCTTCACTCATTCGCCCTG  
ACAGCGAATCCACTACAATAAACAAAGGGGGCAGCCACCC

>RXA00151

ATGTGGGCACTGCATGCCAGATACCGCGGCCGAGACACACGACGAGCCGAATTGGTTAAA  
AGATTTGCAGAAGCTTTGTCCACCCTCGAAGGTGCTGGCCAGTTTGAAGTCATTGGTGTC  
GAAGACATCCGAGCACACATCACCTACCGTTAACACATGTGATGTTGTCATGGCGCTA  
CTCGCAGCTGGCGATTGGGCAATCGGAATTGGTGTTATCCCCACCGTTGACGGAACAGTC  
GATGAATCGGATGAGGCCATCATCGAACAGGTAAAGAAAATTTCTCTGATGCTCTGCGC  
CCCACCGCCAAGGCGGGAACGGTCAAAGTTAGGATCGCCGGAACCAAACGGGACAATACT  
CAAGCCTTCAACATCTCCGCTGCATTCACGTTGATTGGGCAAGTTCTGTCAAAGCGCACC  
ATCGAAGGACGCGAAGCCACCGCACTCGTCCGTTCTGGACTGAATCAAAATGAGGCAGCC  
CAAGAGCTCGGTATTTCCAAGCAGGCAATGTGCGACGATTGCAGGCGGCAGGTTGGCAG  
GCGGAATCTGCTGGTTGGCAATTGGCCGTAAACCTCATCGAGCAGGCTGGCAAGCGC

>RXA00151-downstream

TAGCAGGCGATTTAAGAGCCTGA

>RXA00153-upstream

CCTCGATTTGAGTAAAGAGGACGTCTCGCCTGATTTTTTCGGGTGTGTTTTTGCGTGCGC  
AGCCCTGCCTGGCCCTTCCAAATTATGTAGGGTGGCCTGC

>RXA00153

GTGGGAGCAATAATTTGGTTTATCGGAGCATTGGTTCTTGCTGGCTTGGAAATGGCAGTA  
GGTGAGTTACCTTATGTAGTCTCGGCGGTGCAGCTTTGGCAACCGCCGGCGTGGCACTC  
ATCGGTGTCCCAGTATGGGCTGAATTTGTACCTTCGCGGTGGCCTCAGCTGCTCTACTG  
ATGTTCAATTAGGCCGGCCATTAGAAAGCGTCTGCTGAAACCAAAGGTTCTGGACTCTTCA  
CCACGAGCACTTGTGGCCACCGTGCTGAAGTGCTCGAAGATGTGCGAGCGACCAGCGGG  
CAGGTCCGCCTGGATGGTTCAATTTGGTCCGCCCCGAGCATGGATCCCACACACACCTTC  
GCGGAAGGTGAAATTTGTACAGTGTCAATTGATATCCAAGGCACGACCGCGATTGTATGGAAA  
GAAGCC

>RXA00153-downstream

TAAATTTTAAACAATCAAATAGT

>RXA00154-upstream

TAGCCAGACGGCAGTATTTTGAAGCGGTGAATAAACGTTTGCTCGAATTTCATAGTGTT  
AGGGAAGTGTAGTGCAGTGCTTTGACTAGGGTGGTGAGCT

>RXA00154

ATGAGTTTTTCAGACCCCTATGCAGGCAATATTTTTGGTGAGACTCCCGCAACAAGCAG  
CCGGAGTATCCCGATGTGCCCCGAAAACCAGGCCCTTGTGGTGGAAGTTCGTGGAGATGGC  
TTCGTGCGCGCTGTGACCGGTTTTGAACGCACCTACGATGGTGATTTTGTGCGTCTCGAG  
GACCGCCGCGGACGCGATGCGCTGTACAAGCTGCGCAAGGGTGCGTTCATGATTGATGGG  
CAGATCGTTAACCTCACCCGTTTCGTGGA AAAACAAGCACCACGTAAATCTAATCTGGT  
TCCAGGCGTGTAGAAAACGCGCAAGCAAAGGTGCGCGGCCCGTCACGCATCTGGGTAGAA  
GGCATCCATGACGCCGCCATCGTGGAGAAAGTGTGGGGACACGACCTTCGCGTTGAGGGC  
GTCGTGGTGAGTACCTGGAAGGTCTAGACAACCTGGAGGAACGTCTCGCGGAATTTTCAG  
CCTGGGCTGGACGACGCATCGGAGTGCTCGCTGATCACCTTGTGAGGGATCTAAAGAA  
ACTCGGATGACTAAATCACTACCCGCGGATGTCGTGTCACCGGCCACCCCTACATCGAT  
ATTTGGGCTGCTGTGAAACCAGAGCGTTTGGGGCTTAAGGCGTGCCCTGAGGTGCCATAC  
GGGGAGGATTGGAAAACCGGCATCTGCAAACGAGTTGGCTGGTCAGACCCCAAAGAAGGC  
TGGCACCGTGTGTATAACGCCGTGAATTCCTTCCGCGATTTGGACTACACCCTAATTGGG  
GCAGTGAACGTTTGGTGGAATTTGTGACCAACCTCGATTTGAGTAAAGAGGACGTCCTC  
GCC

>RXA00154-downstream

TGATTTTTCGGGTGTGTTTTTGC

>RXA00155-upstream

GTTGCGGGAGTGTCCACCAAAAATATTGCCTGCATAGGGGTCTGAAAACTCATAGCTCA  
CCACCCTAGTCAAAGCACTGCACTACACTTCCCTAACACT

>RXA00155

ATGGAAATTCGAGCAAACGTTTATTCACCGCTTCAAAATACTGCCGTCTGGCTAGGTGCG  
TGGCTCTATGAATTAGTCCCCACCGAAGATGTCATCGATGCGTTCGTGATCTCGGCGGC  
CCGCACACCTTCGGCGACGGCGGGCTGCTCGATATGCTGCGAACTTTAAAAGAATTAACA  
AGCACGCTTATCGACGCCCCCTTCCACGGTCCGATTTTAACTCTCGCACTCAGCGGCCCA  
GGCCAAGTGCCGGCGTTGCCGGCAGGTTACGCGCTGCGGTCTTGGCTCCGCCTCGAAG  
GAGGGGGCGTTGGTGCTGGGCGGCGTCGATAAGCAGCATTCTTGGGCGCTTATTCCTACG  
CGCGGTAAGGATGCCACTGAGTGGAATTTGGTGAGGTGGAGGGCTTTTGGCCGGCGATT  
GCGACTGTCTCGCCCGGTGAGGCGGATCAGCTGCTCCGTCAGGCGACAGATCAGGCGGCA  
AATATCATTTAGTTAAGTGCTACGCTTCACTTGCGCCGAAATCTTTGAAGAATCCGCGA  
CTAACCGTGGGCATGCTGTGAGATTTTACGACACCCCGGGGCTTCCCTATGCAGTCCCA  
GAGAGGTGCGCGAATCTTTTGC GCGCGCAGATCGCGTGCTGGCTGCCATCGCAGAGACCGTG  
CAGGAAACCATCGGCGATCACAGCCTGGATCCACAGTTGATTTTCTGTGGAGCCATATT  
CGGACCGCGCGCATGGCTGGGGTGAGTTATGCCCTCGCAGAGTTTGCAGGGACTATCAC  
TCC

>RXA00155-downstream

TAGTTGGCAGCTGGCGCCGCTGA

>RXA00159-upstream

CTTAGGGGGTAACCCACCCCTGTACAAGTTTTCGTGCTACCAAACACGCCGTGCTAGGG  
GTGTGCGATGGTGCAATGATCCCCGCTAACCTGGGATTCC

>RXA00159

ATGGAGAATGTTAGTTCCGTCACGTCGGATGGTTCCGGTAGCGGATGTGCATGCCGAACGG  
TGGCAAGAATTGCTCGCACGTTTGGATGCCGATGCGCCGATATTGCGGAGGGCACCGCC  
GCAAAGTTGCTCGCTACGATCCCGGGCTATGAGCTCGTTGACGCGGGGCCGATCAGGGAG  
TCGTGATACGCAATACGGCCTTGATTATTCGCGTGATTAAACGCGGGCACCGAGCCAAAG  
GCCGAGGACTTGCTTGAGGCTTTAAGGCTTGCCGACGAACGTATAGCGCAAAATGTGCCG  
CTGGGAAGTGTGCTGCACGGTTTTTCGGATGTCTCTGGGGGAAATCTGGAGCATTTGGTG  
CAGTTGGGCCCCGAATACAATATTGATCCCCGCGAATGCTGCGCTGGTCCACACTGATG

TGGGCGGTCAATGATGCCTTTTCTACGCGTGCCACAAGGGTGTACCGCGATCACGAGGTC  
GCCACGGCGATCGCCGATTTCGGTGCGAAGGTCAGAATGGATCGGCAAAGCGGTCTCGGAA  
GGCTCTGAACTGTGAGAGCTTTTATGGGGTGCTGCGATGTATGACGTTCCCGCCGACACT  
CCTCTAAGAGCATTGGCAGCCACCTCACCTGATCATGCGAAAGCTGAAACACAGATCCAG  
AAGTGGACTCAGCGCGCCGGAGTGCGGGTGCTGGCATCGGTGCAGCCAAGCGTGATCGTG  
GGGATCGTGATTGGGGAGCCGAAGCGAAACGTGGACGGCCCTGGTTTTGCTGTGGGTTTG  
GGTAGGGCAGAGGTGCTCTCAAAGCTGGCGGACTCATATAAGGATGCATCCCTTGTATTG  
AAGGCTGCCGATAATCTGAAACTTAATGAGGTGCAGCGGGCACAAGATTTGTCATGGAAG  
TTGGCTATCCATGCAAGCCACGGGTGACGGAGATTCTTGCGCAGAAATATGTGAAGCCA  
CTAAGGAATCTGGCGAGTTTGCTCATGAGATCGTGGAATCTTTGCGGGCATATGTGGGA  
AACCAGATGAATATTCTGTCTGCTGCGCGCAGTATTCTGTGCATGTGAATACGCTTCGC  
TATCGGTTGCGCCGGTTTGAGGAGTTAACGGGCTGCTATTTGGAGGATACATCCACGGTC  
ATTGAAGTGTGCTGGGTGCTGGAAGTCTTTGGCCGGGAGCTG

>RXA00159-downstream  
TAGAAAATTGCACCTATATATAT

>RXA00161-upstream  
TTACTATACATGGTGTAGTCCCAAATTAACATAATGCGGGTGACCAACTGCACCGTAAAAA  
AAATTCGCTTATCGTAAATCAGCAGGTAGAATAACACTCT

>RXA00161  
ATGAGCGAGCCAGGGCCATCCGGGGTTAAAGAAAAGAAGAAAGTAAAGGCAAGTCACATT  
GTCTTTCTTCTCATTTGTTTATCGCAGCCTGCGCGTTGGCGTGTTGGCAGTGGTCAAGA  
TTCCAGTCCGGGTCTGGAACCTTCCAAAACCTTGCTATGCCTTCCAGTGGCCTCTTATC  
GGAGCATTCTTTGTTTATGCCTACCGCAAGTATTTGCAGTATGAGAAATGAGTCCATTGAG  
TTAGAAAACATGGAAGCCAAAATGATGGCGGAGCAAGGCAAAAACACCAGTTGCGCAATCA  
GAGCAGGAAGATAGCTTCGTTTCAGCTCTCTCACCGTCCGAGCCTGGTGGAAGATGACAGC  
GTCAAGGAAATCGACGAATCCTTCCTGCCGTCTCGCCCGACGATGGATGTGGAAGAGTTC  
AACAGGTTGAATGATCCGCATGCACGGAGACGTCGAAAAGCA

>RXA00161-downstream  
TAAACCTGGAACCTTTTCCGGGCC

>RXA00162-upstream  
GGAGACGTGAAAAGCATAAACCTGGAACCTTTTCCGGGCCCGCGCCCGACTGCTTTGCTG  
AAGCCCTATCCCGCTATTTTATTTTGAAGGAAGAGTTGC

>RXA00162  
GTGTCTACCACCACCCCAATCCACCCTGAGCGCAAGAAACGCGTTCGTCAGGCCCTCACC  
ATGTTCTCCATCGCTGCGTGCGTGGGTGACTGGTGTGTTTTGCTGGCGCTGGTGGCGGAGATG  
ATCATGAAGTACATAATTGGCATGGATCTTCTGAGTGGGCACGATTTCGTTCCGATTGCA  
CATGGATGGGTTTACATTGTTTTCTTGATGACCACCTGAACCTGGGTCTGAAGGCGCGT  
TGGAATCCGACTCGTTGGGTGACCACCGCTATCGCAGGTGTGGTTCCGCTGCTGTCGTTT  
TTTGTGAGCACAACCGCCGCAAGGAAGTTACTCAGACATTCAGCTGAACTCA

>RXA00162-downstream  
TAGTTAAATACACAAAACCTCC

>RXA00167-upstream  
CCGACAATCCAGTGGAACCTTCCCTATCGCTGTGATGCATTTTTACTTTACGTTCCGGTA  
CCCTGGCAGGCAGATCTTCCAATCTTTAGGAGCCCTCGCC

>RXA00167  
ATGTACCTGTTGAATCCACCAGTCACTGAACCCGAGATCCTCACTGTCAACGAGATTCCG  
ACCGTCGTCGCTGCTTTTGACAACCAACCCATGAACGACATGCCCGCAGCATTCGATCAA  
ACCTACCAAGTGCTCTTCCCCACCTTGGGTGCCAAGGGCATCGCGCCAATTGGCCCCGGA  
TTTGCTCTGTACACCTCCGAACCAACTGACACCGTCAGCTTTGAAGTGGGCATGCCAGTC

AGCCAACCACTTGAGGGAGAG

>RXA00169-upstream

TTTGTGTGTCTAAGTGTGTGGGGTAATTGTAATATAATTGGTAGAATTTTCTCTAATTA  
ATATTTTATTAACCTACGGAGAAAGTTTATGATAAATATG

>RXA00169

ATGTCGTTGGGTAATCCAGCAGCAATGCTCGCTGCGTACAACACCAGCACGCAGGTGGCA  
CCGCAGCCACAGCTGGGACCACGTGCTGGAGAAGTTCAACTCAGTAGCGAACAGCAAGCC  
ATGATTGATTATGTACTTGTCTGGCAAAGATGTCATTGTTGATGCCACCGTAGGCTCGGGC  
AAAACCTACCGCTATTCAACGACTGTGTTCGATCATGGGTGCAGACCATGACGTGCTGTAT  
TTGACGTATTCTGAAGTTGTTGAAGGTCGATGCACAGCAGCGCGTTCTGTGGCGCCAAGGTG  
CAGAACTATCACGGCATTGTCTATCCGCATCTACTCAAGGCCGGCATCAAGTGTGGTATT  
AGCGAGTCGATTCTGGGAGTTTAAACAAGAACTTCAAACACATTTCTCGCACGTTCCTCAGT  
TACGACCTGCTGGTTATTGATGAGTACCAGGACATCAATGAGGACTATGCAGAACTGCTG  
CGCAACATTAAAGTCTGTGAATCCGCTTATGCAGATTGTCATGGTGGGTGATTGGAACAA  
AAAGTCCGGTCTGACACCACGTTAGATCCACAAGAATTTGCAGCACAATTTGTGTGAAGAT  
CCAGTCTTCGCGCCGTTTACACAGTCGTTTCAATTGGCGAGGCTATGGCAGCGGGTTTG  
GCTGATGCCCTGGAATAAACCGATTGTGGGTGCCAATACCGCACAGCAGATTGAATATAGG  
TCTTTTCGCTGAGGCAGTGGTGTGATCCAAAGCACCGAGCCGAGCAAACGTGTGTGTGTTG  
GGTAGCCGCAATGGGCAGATGTCAGATGCGCTTAATGTCGTGGAGAGGAAGTCGCCGGCA  
AAGTTCAATAAGAAAACGTGTGTTTCGCTCTATTTCGCGATGGTGATTCCAGATTGCACAC  
CCTAATGACGCTGCGGTGTTTACCACCTTTGATTCCAGTAAAGGTCTAGAGCGCGATACC  
TGCGTGGTCTTTGACTATGACGAAGAATTCTGGGACATGCGTCTTGGTTACCCCAATGTT  
GATCCAGTGGTCATGCGCAATGTGTGTTTGGTGGCAGCATCACGCGGTAAAAACAAGGTT  
GTTTTTGTACGTAGCGATTCTCTTCAAGCAGCGTATGAGGCTGGTGCGGACTGGGCTGCA  
GGGCTCGCTGTGGGTGTGGTGGAACAATACTGAGGTTGCACCTGAGGTAGATGCCCAT  
ACGCCGGCAGAAAGTAAGGGTGATGTGGGTGAGGTTTCAGTCACAGATTGAGCGCATG  
ATGGGTTTTATCCCTGTTTTCAGTGTGTTAAAGAACTACCTGAGTTGGCGCCGAGCGAATAT  
GCGCGACCGATCTCTGTGACTGAAGCCTTTGATTTTAAGTACGCAGAGAATGTCGAAGCA  
TGTTTTGACCTGCTTGATGTCAAGCGTCTCGACAACGGCAAGGGTGCAGCCATTGAGGTC  
AATCGCAGTGACGGGCTTATTGATCTCTCACCCACAGTGGGAACTTTCAGGAAGCAGTG  
TTCTTCAAGGACTACAACGTTTCATACAGCACTATCGGCGTACCCGAGTCAGTTCGCGAAA  
AATCTTAAACGTTTGGTGAAGAAAAACAATAGCGTATGGCGTAACTGCCTTATTGTCACA  
GCAGCGTCCACAGAGCAGATGCGGTATGTGATCAGGTGCGCAGCTCTATCCCGGTGCT  
GCGGAGAAGGCATTGGTCTCACGGCTGAGTACGAGGCTGAATGCTGATTACGTAATCAG  
ATTCCACTGATCCTTGACGGCGAGGCAGTACAGAGCAAAGTAGTGCGCACGCCAATGTCT  
TTTGCAGGTGTGCGAGATGCGGTGCACAAGGGTGTGCTTTATGAATTGAAATTCGTCTCT  
GAGTTGACACATCCGATGTTTTTGCAGCTCGCAATGTATTTGGTCATGCTCTGGGATGAAG  
GACGGTATTTTGTGGAACACCCGGACAGATGAGGCGTGGCAGGTGCGTGTTCCTGACCCG  
AAGCGTTTTCTTAATGCTGTGGTGTGTTGTGTGCTCCAAGCAGGATTACCGGGTTCGGTAAC  
TTTGATCTGCCGAGCACTGGTGGAGGTGCGCGC

>RXA00169-downstream

TAAATGGTGTGATGTGTGGGGT

>RXA00170-upstream

TAACATAATTCTTTACCTATCCTCAGTTTGTACATATTTTCCGACAGGTAAAGGTTTGATA  
TAAGCGGTTGGTACGAAGACTAGTGGGTGTTTCTGCTGTC

>RXA00170

ATGTTGCTGGCCATCGGGGTTGCATCTCCGGTAGCTCAAGCACAAGTGGAAGATCAATTT  
GAGCTTGTAAGAAAGAACTCAGTGATGAGCAGTTTGCTGATGATGGTGTGACTATGTTCCC  
AATAGGAATGCTCCGACTGTTAAGGAACAACCTGAGGATTTTGAATCAGCACATCCAGAA  
GTAGTCATTGAGTATCACGAGCACGTCAACGATAGTAAAGACAATGTTGAGGAACCTCCG  
CTACCTAAGCGGGACATCGTTGCGAGGGGAAATGCGCTCAGATGTCATCGAGTTACCGGAG  
GGGGTGAGCAAGGACGAAGCTGATCAGGTGGAGGTTGCGGAAGCGCGACTTAATGAGGGC  
GCACGATTGATGGCTGCAACTGGGTGTGAGGCTATGTGGCCAACAGGTTTCTCAGTTTGT  
GGCCGGATTCTTGACGCTTATCGGCAGGTTGGAGGTCAGTTGTCATGGCTTGGGCCACCA

AAGTCAAACGAGTTGACCAATCCCGACGGTGTGGCAAAGAAGTGAATTTGTTGGGGGT  
GCCATCTATTGGCATCCAGACACAGGCGCTTATGCAGTGACCCCTGGACGGTTTGAGGCAG  
TGGGGGACCTTGAAC TGGAATCAGGGCCATTGGGGTACCCAACCTCTGGTCCGATGGAT  
ACAACTATCCCCCTACTCAGCGACAGACTTTTCAAGGTGGTGACAAC TATTACAACCCA  
TTGACTGGCGGTGCTGTGTGGGGCGATATTAAACAGCGCTACGAAGAAC TTGGCGGCTCG  
AATCATGCCATTGGCATCCCGATCACTAATGAGCTACCTAGCGGTACTGAGTATTTTAC  
AATAATTTCTTCAATGGAACAATTTCTGTGGCGAAATGATCGTCAGACACGGTTTATGTAT  
TTGGCTACGCAGCGGGTGTGGGATGCGTTGGGTCTGGGAGACGGGTCGTTTAGGTTTTCCT  
GAAGCAGATGAAACACCTGAGGTTTCTGGTCTATTCCATGTGGTGAATTTTGCGGAGCGC  
GGGGTGATTGCGTGGAATGGAATCCTAGGCGCCAGAGAGCTGTATGGTGATGTTTACTCC  
CTGTGGCTGCAATACCAAAATACCGATACTCCTTTAGGGTGGCCGATACCATCATTGACA  
TCATTAATGAGTCACTCGAACAAGAATTCACCAGAGGTGTTGTTT TAGGCTCAGGTGAT  
GCACTGACATGGATTCTTGACGATGAAGAAAGAAGTTTGGAGGATTTCCCTCCCAATTGGA  
AGTAGCGGCTCATCCTCATCGAGCCAAGAGATGACCCTGTTTCCCAGCGTGACAATAC  
GTGGATTGCAAGAATCTTCCCGATTTAGATGAGCAGAGAAAACTGAAAACAACATTGAA  
AAGAATGGTGGCCCGATCAAAAAAGAGTATAGTTCGCGAGGTTTCCCCACCGAGTTCAGA  
TTTGTCTGTGAGAAAAGGGCATTATGACCGTTACAGGAATGAAGGCTGGGGATATTTAAAA  
AACTATTGCAAACACAACCTTCGCCAACACGCTATGGCTGAGGCCGTAGTAGATAAAGCG  
GTGATTGATTATGGCTCATCGCCAGGAACCAGCTATTACAAGTTCGAGAAAACGGTGTAC  
TTTCTAGATTGCAGAACTTATACATTCATAAAGAACTCAGGATGTAAAGAAATGCACGCT  
CCGCAATGGGTGACTATTATTTACAATCCTCATACTTCTACTGGAGCAAATTCGAACAGA  
CCCAAGGGGGTAATTT CAGCATGGTGTAATTC AACCCACCTGGTGGAATCGAACACGAG  
CCTGAAATTTCCCAATGTCCTGATCATGTGAATCTTTATAATAAGCTTCGCATA

>RXA00170-downstream  
TGACAGAACCCCATCAACTGTGC

>RXA00171-upstream  
CGATTAAGGTAGGGGCCTTAAAAAGGGGAATAAAGAATATTGGGCCCAGACGAAAAC TGC  
TGGCGAGATCATCAAAGATCAGCAGAAGCAGATT CATAAC

>RXA00171  
TTGGCAGCTGAGGTAAAGCGTCTTCGTGAGCGTGACGATGCACGAGATCAGCAGCTAGGA  
GTGCTTAATGAAGCCATGTTTTCTACTACTAGGAGATGGACTTGACCGTTTTCTGTGAATCT  
GGCGATGAGGCATCCTTCAATGCTGCATTGAACTATCAGGCAGTGGTGGCACCAGAAATG  
TTTAAGACCGTGTATGGTGTGATCCGTCTACCGGAGAGCCTATTCCCACT

>RXA00171-downstream  
TAAAGTACAACACAGTCTTTTCA

>RXA00173-upstream  
TGCCCTGATCCACACACAAC TGTGAAGAAAGAAGCCGCAATGTCCACCACATCCACCTAT  
GAGAGCCGTAAGGCAGCTATTTCGCGACGCTATTCTCGCCT

>RXA00173  
ATGTCAACAACAAATCAAGGCTGCTGCACCCTACAGCCTTCATGCCCATGATCTCGAACAG  
CTTGCTGTAGATCTCACTTTAGTTACCACCTTTGATAGCAATGCTGCAGTTGATGTCACG  
CCAACACATACAGAAGCACCTGGTTTTACCCTGCATGAGGGCACCGATACTGCGCCTATG  
GCTCCAACCCTGGTCTGTACCTATTTCCAGCGACATCTCCACAGCCGTTTCGGAATATCT  
ACATTAGTGCAGCAGGCTCGCACCGACGAGCAAGCGCCATT CATGAAGCAGAAGCTGAA  
TTTTACAACCAACTTGCTGCGGTCCTTGCTCAG

>RXA00173-downstream  
TGATTTAATGTGGCCGACACACC

>RXA00174-upstream  
GCGGTGTGGCTGTTACCAACAATCCCGATGGCACTGAACAAGGTGATGCACGCCGCTGGG  
TAAGCCACTGGGAATCATAAAAAAGAAAGTAGCACTAGCT

>RXA00174  
 ATGCCTAATCACCCACCTATTTCCACCTTCGATGACCGTCGCTCTGCTATGCGCGAAGGC  
 ATTACTGATTACCTTGCCAATACAAATGCAAATGGGTAGGCGGTACAGCATCAGCGAC  
 ACCCACCTCGACAATCTTGCTGAGAAATTCACCCGCACACATGGTGAAGCACAGTACGAT  
 GCCGGCTTTGATCCCCAATGATCTTGAACCAGAGACTTTTGTTCGTGACATTGAGATGAGC  
 TGGGATGAGCGTGCTATTGATCGTGCCCTGATCCACACACAACCTG

>RXA00174-downstream  
 TGAAGAAAGAAGCCGCAATGTCC

>RXA00175-upstream  
 AGCTCGACAGCCGTAAAGAAGTTGTAGGTCTTTTTTCGCTTGGGATACTGATGCTCTCCCA  
 AGCGAACATGGGCGGGAGCCCATGTCGGGGTGTGTGCGA

>RXA00175  
 ATGGCTGTGTGTCAACTACCTCAGCCTGAGAAAACAACACTTATAAAGAAAGACCTTTTA  
 CTCATGACTTCTACAACCTCCACCGCCATGTTCAACGACCACCTTATCCCTATGGCA  
 GAGCTTGATGAACAAGCTCTGCGCGACAGCGTTGGTTCTTGGGCACAGTACAAGCACCCG  
 CTTGACCAGCGCAAAGAACCAGAGCTCGTCCTTATTCGTGCGCTCAACAGCTCAGAGCGT  
 GTGTGGGTCTTAAGTTTCACTGACCTGCGTGCTGATGCAGGTCTTGTGCCTCGTAGCACA  
 CCGAATGCTGACCCCTCCAATATCCGCAATACCATTTTCTCTGTCGCTGTCCGCGATCTT  
 GTCCTTGATCGCTCACTTCCCCGGCTGCTTAACCTCAACGGGCAACCACCAGCAGGTGAA  
 TGGGAAGAAGGCTTTGTCTACGTCGATTATGACCAGAGCGACACCGTAGATGGCTACCTC  
 ATTGAGCACAGCGAACCTGTCTCCATTGAAAGTCAAACCACCGGTGAAATGCACATTTTC  
 GATAAGGTGCCAGGCGGTGTGGCTGTTACCAACAATCCCGATGGCACTGAACAAGGTGAT  
 GCACGCCGCTGGGTAAGCCACTGGGAATCA

>RXA00175-downstream  
 TAAAAAAGAAAGTAGCACTAGCT

>RXA00176  
 CAGCTGATGTACTCGACATCATCATTTACCACCGTGAAGCAGACCATCGGCATTGATCTT  
 GCTGAAGTGAATCAGGGCCGTGCACCTCGGCCAGGCTCAAGGTGAGGCACAAGGCAAAGCT  
 AGTGCAGCAGCCCTTGAGCAGGCACCTCATAATGAGCAG

>RXA00176-downstream  
 TAAATAACACACACCACATGTGC

>RXA00179-upstream  
 GCGGGTTCGCCAAACCTTGGTGATCTCGTTAGTGTATGTATCAAGCATTTTCTTTTTTGCC  
 CAACCATAATTGAAAGGTCCACCAGCCCGTGACCACCATC

>RXA00179  
 ATGATCGCTATTACGCTATTGCGAGCAATCCTGTTTCCTAGGACCAGCAACAGTAGCTAAC  
 TCTCAGTTCCACGTCCGCGCGTACGATGCACACAACGGCAACACCCAAGCCGCTGGCTCC  
 GCAAAAACCCCTTTTCAAGATTTCCAGTCTACGGCATGCTGTCCCTGCTCGTGCCTTTG  
 CTGGGTATCGCCATCATGCTTCTCGATTGGTCTTTCTACAAGTCTGAAGGCCAGTTCCAC  
 GCAGCAATCGCTCTCAGTGTTATCACCTGGGCGCTGCTTCTCTCGTTATCTTCCCACGC  
 CAGAAGAAGATGATGGGTGCTCTTGACCTTCTGGAGGACGATGAGCAGGCTGCAAAGACT  
 TACGAGATCGAAAACTGGGACAAGGCGAAGAGCCAGCTGTCCATGTTCCGGCGGCATCTGG  
 GCTCTGCTGTGGGTTCATCATCGCTGTGCTGATGTTTCATC

>RXA00179-downstream  
 TAACACATCTCAAATTGCCAAAA

>RXA00180-upstream

AAACGAGGATGTTGATTTTCGCTGACGCAGCTCAGAAGCTTTCGAAAGAAAGTTAAGCCTT  
AGAGGGAACCAAACGCCAAGGCGATGAGTCTAACCCGAGT

>RXA00180

ATGAAGAACTTTATTCGGGTACTCATCGCCTTTAGTGTTTTCTCTGTATATATACCGTT  
GCTCCCCACATTGGCCGAGGTCTTGAGACCTCGCACCAGTTACAGCAATCCCCAACGA  
GCCACAGTCCTAGGCTATGACAGAGCCTCCATGTTTGGCGGATGGTTGGGTGGCGTGCGG  
GAAGGCATCGTGGATGAAGCCGGCGACACTGATCCATACTCCGGGAATCGATTAGACCTC  
TCTAGTGCCGAGGTGGATCATATTCTCCCGCTCAGCGCCGCTGGGATCTAGGCGCACAC  
CGGTGGAGCGCTGGCGAGAGAATCAGCTTTGCCAACGACCCCTCAACCTCGTGCTCGTC  
TCAAAGCTGAGAACCAAGAAAAATCCGATCAACTTCCAGCGAGTGGCTCCCCCTCTGAT  
CGAAGTGACGATGTTGGTACGTGGAACGCCTTTTCGCCGTGGCCAACGCATACGAACCT  
CCGTTACCAGAAAACGACATTCGGGTGGACGAAAACAGTGCGGGTTGCCAAACCTTGG

>RXA00180-downstream  
TGATCTCGTTAGTGTATGTATCA

>RXA00183-upstream

CTGGCCAGCGCCATCGTGGGCGAGGGCGAAGGCTGGATCACCGAACTCAACCCAGAAGAA  
TTGGCTATGCTGATGAGTTACCGCGAAAAGGAGGGTGCAG

>RXA00183

ATGACTGAATCAGCCGCGTGAAAAATGGATAACGTTATTTACGCCAATTTTGGCAGCAAA  
CAGCGCGTATCTACTCTGATGACCGCACCCAGGTGATTAATAAATCACGACACAAACAA  
TTCAGCCCAGCGGGTACTCGTACCGTGATGTTGACGGAGAAAAACGCCGACAGCGGACGA  
CGGTCCCGCGGTGAGCAGTACTACCGAAACGGCAATGTCACCGGCATGACTGTGCTGGAA  
GGCCGCGTGGAATGCACTGTGCGGGCTCCCAAAACGAGCCGTTTGTACCACAGTGACC  
TTCCCATACCGAAGCTCGGAAAAACTCCGCGAAGCCTACGCAGCTATTGCGGATACTCCC  
AATGGCCTCGGGCTTGTGCGTGATGGCCATCTGACCTCCTCCATGCTGGATCACTTGGTG  
GGAAGTCCTGATGAGTCGATTTATTTTGACTGCACCTGCCCGACCGATCGCTTGTGTGT  
AAACATGCCGTTGCCAGCGCGTATCACGTTGCCGAGAAGATGACCGGAACCCCGGTCTG  
ATCTTGGATATTCTGGTCAAGGGATGGCTGGATTAGAAGCACTGATTCGGACCTATCAC  
ACCAAGGTTGAACTGAACCTGAAGACAATGACAGTTTTTGAACGGCAGGGAACCTTCCT  
GCTTTGCCTGATCCAAAGATTGCCCTGCTATCGACGATTCGGATATCAACTACCTCCAC  
AAGGCTTTAAGGATGGTCTCATACACCTCCCTGGAGCAGCTTCGTGCGGTGAGTGATATT  
GAAGATATGTACGAGATTTTGGTAGCCAACCACCCTGATAACCAGCAAGTGATGAGGAA  
GAAGACACTGAT

>RXA00183-downstream  
TAACCAGGGCTTATGGTTGTGGT

>RXA00185-upstream

ATTGCGAGAGCTCGCTGACTCTGTGGTCAATGGTGCAGCGCCGGAAGAAGACCGCGATGC  
GCTCAACCTATTGTTCCGACTAAGCCGGGAGGTCTAAGAC

>RXA00185

ATGCGTATTCATGAAATCATCATTTGACAATTTCCGAGCCATCGAACATCTAGAACTTCGT  
GACATTCTGACCAGGGCGTTATCGTGATCCACGGTGACAATGAGCAAGGCAAATCTTCA  
ATCCTTGAAGCCATAAAAAACAGTTCTGAATAGTAAACACAGAACCACCAGCAAGACGATC  
AAGGCCATTACGCTGTGACCGTGATGTTCCCATCAGCATCACCTCGAGGCAACCGTA  
GGCAGGGTTCGATTCCGCATACACAAACGCTTCTTAAATCCACAGCCGAGAACTGCAA  
GTCATCGAGCCACGTCCATCCAACCACCGTGGACTAGAAGCCGAAGCTGCACCTGGCAGAA  
ATACTGGAAGCCATTTGGACACCTCTTTGCTTGACGCATTGTTTATGAAACAGGGTGAA  
GTAGAAGCAGGTATCAGCGCTGTAGGAATTCCTACCCTGACCAGCGCTTTGAACGCTCAA  
AATGGCAATACCGAAGATGCCACCGAAGACACCGCACTCATGGAGGCTGTAGAAAAGGAA  
TACCTAAAGTTCTACACCAACTCCGGAAAGGCGAATACGAGGTTCTTACAGTTTTCCAAA  
CAGGTGGAACCCCTTCGTACTGATTTGGATGAGGCTAACGCTGAAGTAGCAAAGCTCTCC  
TCCCATGTTGACCGAGTTAAACGATTGGAATTTGATCGGGATCAGGCCACAGCACAGTTA  
CCCAAGGCAGAGGAAGAACTCGCAGGGAGGAAAGCAGAACTGGAGGAAGCCCAAAGGTT



AAGGCTCAAGCCACGGAATCCTTGCGCAGTTTTCCCGGGCGGAAGAACAGTTAGAGCAG  
GCAACAGGAGCTCAGAAACGACGTAAAGAAGCTCCGCAATAAGCTGGAATTAGCACAGACA  
GAAGTCGAAAAGGCTGAAGCAGGGCAAGAGAACCCTGGCGCAAGAAGCTTCCCGTGAAGCA  
GAAGAATTCTTAGCCTTAAGTGAAAAAGTTTCGAGGCAGCGCGCAGCTGAAACTCTGGCC  
GTTGAAAAGGTGAAAGCAGCAGCTCAATCGGTTGCTGGAATCAAAAACCGTGACCGTAA  
GAACACCTCACGGTTATGCTTGGTGAACCTTGATCGAATTGGGCAGCGCCTCTACGAATTG  
CGCAGCGTCCAGCACTCATCGGTGCGTGAGCCAGCGTGATATTGATGCTCTGCAAAAG  
GCGATCACCGAGGTTCGATATCCAAAGGACGCTCGTTGAAGCGCAGCAGGGAAGTATTACC  
CTCAGTGCTTCCACACCCACCGACATTCAACTAGGTGATGACACCGTTTCAGCTACCGAC  
GCTGGAACCAACAGTTGCCCTCGACCGAGAATCACCCTCGTGGTTCGGCGATGTCACCTTG  
GTGATTAACCCAGGAAAAACAGCAGCGGAAAGTCGCACCGATTTTGAATCCGCCGAGGCA  
GCATTGGCGGAGCTGCTTGATCAACTCGACGCTCAGACTTGGACCAGCTCAGGGAACGT  
TTCAC TGCCCAAGAGCAACGAGACGCGGATATTGCAGAACTGGTTTCGCGAACAACAGCGC  
ATGAGCGGTGGGACAGAAACAACAGTTTACGTGCCGAGCTAGAAGGCCTGCACGTCCCA  
GAGGATCTAGACCCATCAATTTCTGTGGATGATGCGCAAACCTCAGTTGAATGAGGCAGAA  
GAGTCCAGAGAGCTCGCTGCGGAGGCGCATAAACACGCAAATGCAGCACTTGATGGATTG  
CGTTCGCGTCCCGTAGATAAAGCTCTGACAGTTTTCAACGCTCAGCTCGCAGCACTGCAG  
AGAAACCTCTCTTCCGCACAAGTTGAATTAGACCGTGCAGTGGCAGAAACCTCGGATGAC  
GAAGTTGATGCTGCTGTACAGCGGTGCGCTGAAGCTCTAGCTGGGGTGCGGGTACAGAAG  
CAGGAGATTGAACAGGTCTTGGCAAAAACCAACCCAGACATGGCTCAACGCTTATGTGAT  
GCTGCTGAAGCAAATGTGCGATCGTATAAACGCGCAGTGTCTGATGCCACCACAGAGTTG  
GTGCGCCTGGAAGGCCTCATCGGTGTAGCTGCAGGTGCGAAAGAACGACTAGATAAAGTT  
AAGTCTGCGCTGACAGCAGCTGAAAACCGGTTTGAATCAGAACAACGTCGCGCCACGCT  
GCACGTGCGCTCTATGCCCTCATGGTGTCTACCGTGATGAATCCCGAAAGCGCTACGCA  
GCACCTTTCGCGGACAAACTATCCAGGCTGGCAGCATCCGTATTTGGAGAATCAGCAGAC  
TTTGATCTTGATGATGAGCTGAAGATCTCCAGTCTTCATAGGACCACGAACAGTGGAC  
CTTGCCAACTCTTCTGGCGGCGCAAAGGAACAGCTGGCAATCCTCACCCGCTTTGCTATC  
GCAGAATTGGTAGCAGAACTCCTCCGCGCAAGGTGCTGTGCTGTGTTTATTGATGATGCA  
TTGGGGAGCACAGACCCAGAGCGACTGACCCGCATATCTACTCTGTTTAGTGATGCAGGC  
AAGGACTCTCAGGTGTTTGTCTCACCTGTGTTCCAGACCGGTACAACATATGTAGAGGTC  
ACCCAAAAGCACAGCATCGAGTCATTGAAAAC TGCCAACGCTCTGCTG

>RXA00185-downstream  
TAGCTGAGCAAAAAGCCAAGCAA

>RXA00194-upstream  
AAATATGAGAACATAGTGAGAGTTAAACCAAGTTCTGTAGGTGCTTGTTCAGCGGGCGC  
GAAGGCGTACCACTGCAACTTGCGAATAAAGGAGTAAAC

>RXA00194  
GTGGCTGGTTTCTCCACACGATTGAGCCTGAGATCTACCGCGGTGTATCCACCCTTGAT  
GAGCCTTCGGCTGCATGGGGATGGCAGCGTCTCAAGCGCAACACCATCCAACCTCGCTGGC  
TGGATTTCCGTTCTGTTCATGCTTGGATACAACCTTCGGTAACCACAAGGGCCACGTTGAA  
ACCATCTGGCTTCTCGTCATCACCGCCCTTCTGGTTCATCGGCTGCTGATCCACCTGTTT  
GAGCCAAAAGCTCTTCCAGGTTTCGACCATCACTTCTCGCAACAA

>RXA00197-upstream  
GTCGATGATATTTTGGCAACCGAATCTGAGGCACGCGCGCGTGCGAATGCTTTGATCAAC  
CGGTTGGCAACCAACTTGTAAGCTAAGGAGCTTCCGCTC

>RXA00197  
GTGGCAGCCTATCTTCTTGGTGTGCTATTATTTTCTCCTCGGCATCGCAGTAACCATCGCG  
CTTACAGAGTGGGGGCACTTCATCACAGCGCGCATTTTCGGAATGAAAGTGCGGCGTTTC  
TTCATCGGTTTCGGCCCCGACGGTGTTCGCAAAAAGACGCGGCGAAACCGTGTACGGCCTT  
AAAGCGATTCCGGTTCGGCGGTTTGTGACATCGCGGGGATGACTGCCCAAGATGAACTT  
GATCCGGAAGACCTGCCGCGGCCATGTATCTAAAGCCCTGGTGGCAGCGCATAATTGTG  
CTTTCCGGCGGCGTGATCATGAATCTGATCGTTCGGCTTTTGGTGTCTTACGGCGTGGCG  
GTGAGCTCCGGAATCCCGAATCCGGATGTGGATAACCCGCGACAGTCGACACCGTTTCAG  
TGCGTGCCGGAAACCCAAATTTCCGCAACTGAACTGTCTCTGCGTAGGTTTCAGGCCCA

CGGGGCGACGCCGGCATTGAGCACGGCGATAAGATTTTGGCCGTCAACGGCCAAGAGATG  
GCAAGCTTCACCGCCATCCGCGATGCGATCCCTCGAGCTCCAGGCGAAACGGCAACGCTG  
ACGATTGAACGGGAGGGAACGCTTTTCGACGTCGACCTCCAGGTTGCCTCTGTACCCCGT  
CTGCCTCTGACGGTTTCAGAAATTACCGTCGGCGCGGTGGGCATGTGAGCCTTCCACCG  
ACCGATGTGTACAAAAATACGGCCCAATCGAGGGTGTGGGAGCAACTGCACGTTTCACC  
GGCGACATGATCAGCGCCACGTGGGATGGCTCAAAGCCTTCCCGGCGAAAATCCCAGGG  
GTCGTCGCATCCATCTTCGGTGCAGAACGAGATGTAGAAAGCCCCATGAGTGTGGTGGGC  
GCGTCACGCATCGGCGGCGAATTTGTGCAACGTTCCATGTGGGACATGTTTCATGATGATG  
CTGGCCAGCCTGAACCTCTTCCTCGCGCTGTTTAAACCTCGTGCCGCTGCCA

>RXA00199-upstream

ACCCAGCACCATTTTTTGTGGTTTGCTCTAAGTTATGGGCGAATCAGTAAGTACTGACAG  
GTACACTCCGCAGCAGCGCACGCGTTATCGCCAGCTGCTC

>RXA00199

ATGGAAGATCTTGAGATTTTGTATCGGCATTTCGACGATTCGGATTTTGAGGATCAGGGT  
TCCATCGGCCCTCGAGTTGGAACCTCAACCTCGTGGATAAGCATATGCAACCTGCTTTGGCA  
GGCCACGCGGTGCTTTCCCATTTAGACGATGAGTACCAGTCGGAGATCGGTAACCTTAAT  
GTTGAAATGAACCACCGCCACTATCCGTAAAGGCGATGCTTTACGACGCCTCGAGCAA  
GGCATCACCTCGCGTCTAGGTGCGGTGCGCGCGGCCGCCACATCGGAGAACGTGAACGTG  
GCGATGATCGGCACGCTGCCACCATCACCCAGAAATTCCTCGAAGATCCGGCATGGATG  
ACCCAAGAAAACCGCTACCGTGCCTGAGCAATGCGGTGATGGAATCGCGTGGCGAGTTA  
GTGCACATCAACATCGCCGACCGTGAACAAATCATCCACGATTTCACTGATCTCGCCCC  
GAATCAACTTGCACGTCTATTTCAGTTGCACCTGCAATTAGCACCCAATAAGTTTGCTGCA  
GCGTGGAATGCGTCGCAAGCAATAGCTGGTGTTCAAGCAGCTCTTTCCGCCAACTCCCCA  
CTTTTCCTAGGCCGTGCGGTGTGGCATGAAAGCCGCATTCCAGTGTTTCAACAAGCTATC  
GATACGCGTACTCTGAACCTTGTGAATCAAGGAGTCCGCCCCAGAGTATGGTTTCGGCGAA  
CGATGGATCACCAGTGTCTTTGATCTTTTCGAAGAAAACGTACGCTACTTCTCCCTCTC  
ATCGCAGAAATCCCGCGCCCTGTCTGGCACACCAATGATGAAGGGAAAATCCCCCGCACTC  
CACTACCTCAATCTCCACAACGGAACGGTGTGGCGCTGGAACCGACCCATTTACGCACCG  
GGGGAAGAGCGCTCTCATCTGCGTTTGAAAACCGTCTCCTACCTGCAGGTCCCACCCCC  
ATCGACATCACCGCCGATGCCGCTTTCTACTACGTTTGGTTAAATATCTGGCCGAGGAA  
AACC GCCCTGTCTGGTCACGTCTCCTATTCCTGATGCGGAAAAGAACTTCCAATCCGGT  
GCACGTTTCAGGGCTGTTTCGCCCCGATGACCTGGCCAACCTCGGACAAGTCAACGTTGCG  
AATCTGGTCCAAGAGCACCTCATCCCTCAAGCCAGAATCGGACTGGAACGACTCGAAGTA  
AACAAAGACCTTATCGACCAATACCTGGGCATCATCACCGAACGCGGAAGTCCCGCCAA  
AACGGTGGCAGCTGGCAGTTGCGTAGCCTCAACAAGCTGGAAGCACACGGAAGCATGCCG  
GGTTCGATGCTCGAAAAGCAGGTCTTGCAGCAATGTTGCAACAGTATTTACAGAATCAA  
GAAAGCGGCAACCTGTCCACACATGGGCTATTGGTTTCG

>RXA00199-downstream

TAAAACGGCAAGGAAAGATAATA

>RXA00200

CACTACGCCGAGTCACCGAGATTCCTGAATACCGAATCTCCCCAGACCACGGCGGAAAA  
TCCACCCTCTCCCCATTCCAAGACTGGGCAGGCGCGGATCCATGGGCACGGCCGAAGCA  
GTAAACAACGCCTACGAAATCCCGTCCCTACCTCCGCAACGACTGGGGCCGCGACTGGGGT  
TCCATCGAACGCTACTCGCTGCGCACCAACTCCAACGGCGATGCACCTAAGGTTGCAGAC  
ATCAACCTTGAAACCATCCAACGTTCCGGACTCTGGAATCCAGGGCATATGAAGGTAGAT  
GAA

>RXA00200-downstream

TAAGACCTTCAGTACTGGAAGTT

>RXA00207-upstream

CTGCACAATTTTTTGGTCGGACACATTTTTTGCCCCCATTTGGGTTGTTCGGATCAGATCAAGA  
AAACCCCCGCGGAAAAATTTTGTCTCTAGACTGGCTCACC

>RXA00207  
 ATGGAAATGAAATTGAAAAAGGCATCCCAGGTCAGCACTGCCACCGTCGTCGCAGCAGGT  
 TTGATCGGCGGTTGGTTGACTGCCCCGTGAATCCGGCATTTCGCCCCTGGGCACCATTTCAA  
 TTGGCAGCATCCGGAGCGCTTGCTGCACGAAGCTGGAATGAAAAGAAGGGTCCTGCAGTA  
 GCTACTGGCCTGCTGGCAACCTACGTTGGTGCATTTGGCCTGTCCCACCCACTTGCCAAG  
 AAGATTGGCGCGTGGCCTGCAGTTCTTACTGTGACCGCTGGCGCTGCTGCGATTGCTTAC  
 GCAGTATCTGACTCCCAAG

>RXA00207-downstream  
 TAATAATTACGGTAAAAAACTT

>RXA00211-upstream  
 TGAGCCAAAATCAATAAGGTGTTTTTCAGCCTGAGGTAAAAATACGGTGGTACTGTTCGAA  
 ACCAATCATCCCCCTAGTTTTTGAAAAGAAGGAAGCGAGCCA

>RXA00211  
 ATGTCATTCTGATCCGCGTCCTGTTGTCCGACACCCCAGGCAGCCTCGCGTTACTCGCT  
 GAAGCCCTTGGGATTGTAGAGGCCAATATTCAATCCGTGGACGTGGTGGAACGCTTCCCC  
 AATGGCACGGTCATGGACGATCTGGTGATCTCCATCCCTCGCGATGTCATGGCAGACACC  
 ATCATCACCGCAGCTGAAGAAGTCGACGGCGTGGAGATTGATTCCATCCGCCCCATTCTCC  
 GGGACTGTTGACCGCCGCGGACAGATCCAAATGCTGGCTGCTGTTGCTCACCAACGCCCGC  
 GATATCACCGCAGCGATGGGAAGAAATGGTTCGATGTCATCCCCCGCACCATGACCTCTGGT  
 TGGGCTTTGGTTCATTGATCTAAAAGGACCCATCACTCGCATCGCTGGTTCCCTAGCAGCG  
 CCCGAAGATGACGGCACCGTTCCGGAGAATCGTTCTCAAAGAAGCTCGCATGCTCAAC  
 CCGGAAAACGATCCGTGGATTCCAGAGTCTGGACACTGCTTGATTCTTCCCTTGCCATC  
 GCTCCGATCGGCAAGCACGGCTTGGCTCTGATTATCGGTCGCCCTGGTGGCCCTGATTTT  
 TTGGCCAGCGAAGTGAGCACTTAGGCCAAGTCGGTGACATTATCGGAGCAATGCTTCAA  
 AAA

>RXA00211-downstream  
 TAATCTGAGCTGTTTAAAAAATG

>RXA00218-upstream  
 TCTAAACTCACGCTAGACTTCTAAAAGATCTAAAGTTTCAGTTCCAACACAAGCCAGCACT  
 GCATTCCGCAAACCCGACTAGACCATCCAAGGTGTCTTCT

>RXA00218  
 ATGTCAGCTCGCAATCCGTTCCGCCCCACTTTTCGGAGTTTCCCCCACCCTACTTGCAGGC  
 CGAGACTCACTTCTACAGTCTTTCAAACCTTGGTCTCGCGGAAGGCCCGGAAGCCCTTTT  
 AGAGCATTGCTGATTTTCGGGATCTCGTGGCATGGGTAAACTGTGTTGCTCAATGAATTT  
 GAAGATGCAGCTGCGTCTCAAGGGTGGATCACGCTGCGCGCCTATCCGGATAATTCCATG  
 GTGGATGGCTTAGTTAATTCCGCCATCCCGGAGGCGCTACAGAATCTTGACGGACCGCAG  
 TCCAAAAGAATGCTCAGTGGTGTTGGCCATTCTGGTATCGCTACGGTGACGGCCATTGCT  
 GATCCAACCAAGAAGGATCCCACTCCACGCTGATTTCCAGGCTCCGCGAGTTGGCTACT  
 CGTTTGCAAAAGCACGGCTCCGGAATTTTGATCACCTTGATGAACTCCAAAGCGCCAAT  
 GTGGATCTTTTGATGTGTTGGCCACTGCGGTCCAGGATCTCCTACGGGATGATTTTCGAT  
 ATCGCATTTGGTAGCAGCGGGTCTGCCAGAGGGAATCGATCGTCTTCTCCAGCATGAGGGC  
 ACAACCTTTATCCGCCGAGCCGAAAGAATCCTGCTCAATCCTGTCAACCATGAAGATTTCG  
 GTGGAGATGTTCTTGATACCGCTGCGGAAGGCCAACGCCACATGACTTCCGAGGCCGCC  
 GAACTCGCGGCGCAGATCAGCAAGGGCTACCCCTACTCCATGCAGCTGACTGGTTCTCTG  
 GCATGGGCGCGAAGTACTCTTGACAACCTCCGATACCATCCAGGCCGAACAAGTAGATGCT  
 GTCCGCGACGAGGTTGTGCGCCGCATGGGCATGCAAGTCCACGAGCCAAGCCTGCACCAAG  
 GTCCCTGATGGTGAGCTGACCATTTTGTACGCGATTGCCCAACTGTCAAAAAACGGCGAG  
 ATGGTGTCTACTGGAGATATCGCACACCTCATGGGCGTCAAGCCCAACGCCTTGTTCGATG  
 CAGAGAAAGCAACTTCTCAGCAGAGGTCTCGTAGAGGTTCCCAAGTACGGTTTCTCTCAAT  
 TTCACTTTGCCGTACATGCGCGAGCACCTCCTCAACAGCCCGCACCAACCGACCAATCACA

>RXA00218-downstream  
 TAAGACACAAGCACTAAAACAGC

>RXA00220-upstream

AGATCGTGCCGAGTTTCCGGTTTGGATGGGGTTTGGGATGTTAATGGGAGAGGATCGGCG  
TGATCGTGCCGGTTTTCCCTGCGTTGGTAGTCTTGGGGCT

>RXA00220

ATGAGCGCATTTCCACATCCGAGCGGAACAATCGCACGATATCAGCGCGATTCATGATGTT  
ACTGAAGCGGCCTTTACAGGAATTGAGCATTCAGATGGAACAGAGCAAGATCTCGTCGAT  
AAGCTTCGTGCTGCAAAGGCGCTGAGCCTTTTCGCTCGTCGCTGAGGCGGATGGCGAGGTC  
ATTGGGCATATTGCTGCCTCTGAGGTGCTGATTGGCGGTGGGGTGCAGGGCTGGTTTGGC  
ATTGGGCCTGTCTAGTGTTCGGCCCGATAAGCAGCAGCAAGGCGTGGGTATTGCGCTGATG  
GGCAGCGCGCTTGATCAGTTGCGTGCGGAGGGTGCTGGCGGCATCGTGTTGCTGGGGGAT  
CCGGGCTATTATCGACGCTTCGGTTTTGAGGTGCTGCCCCGGGCTGGTCTATCCGGACGCG  
CCAGCGGAATTTTTTATGGCTGTGTGTTGAATGCTCCGGCGTTTCCGCAGGGTGTGTG  
GAGTATCACTCGGCATTTGGAGGG

>RXA00220-downstream

TAGAGACCCCATCGTGGCGGGCC

>RXA00222-upstream

AGGGAAAACTACCGTCCGCTGGACAAAGTCATCGATGTACTCCGCGTCCTTGGACTCG  
AGCTTTCTGTTGGAATTCACGATCCCCCTCAAGGTTAATCA

>RXA00222

ATGACCCCCACTGCCGATATCTGGTTTAAAGATACTTTGGCTGCTCATTTTACACGCGAC  
GGCGACCAGACCACATTTCTCTACACAGCTGATTACGCAGGTCCACCGATTGCCACGTCC  
CTGCCCATCAATTCTGAACCCGTGATTACGCGCTCTGGAGCGATCCCACCATTTTTTCGCG  
GGATTACTCCCCGAAGGTCTGCTCGCTTAAGTTCACTCCGGAGAAACATTAAAGCCTCTGCC  
GATGATGAACCTTTCACTCCTTCTAGCAGTGGGAGCTGATCCTGTTGGTGCAGTCGCTATC  
TTCCCCCATGGTGAAAATACACAACCTGCACCACCCACAGTTGATTTTGACGATGAACCTT  
GATTTCTCGGCTGCACTAACCGAGTCCGGGATTGCGGATCCCGTTGCACTGGCCGGTGTC  
CAAGACAAAGCCTCTGCACGCACCATCGCGGTCCCCGTTGCAAGCGATGCCATCTTGAAA  
CTCTCCCCGCTGAATACCCCTTACTTGGTGGAAAACGAAGCAGCTTGTTACCAGTTGCTG  
ACCAAAAATAAGCTTCGCATTGAACTGTCCAAAGTAGAAGTTCTCCATGACAAACACGGC  
AGGTCCGGACTCTTAGTTACCCGCTTTGACCGCACACCCAAAGGCAAAATCCCCGTCGAG  
GATGCAGGACAGGTCTTGGGAATCTGGCCTGCAGATAAATACTTAGTGAGCTACGAGGAC  
ATCGCACAAAGCCCTCACTAAAGTGTGCGCCTCCCCCATCTTGGCGATGCGCAATCTCGCC  
TTCCAAATCGCAGTCGCGTGGCTCAGCGGCAATGGTGATCTTCATGCCAAGAACATCTCC  
ATTATCAACAAAGGCCGCGGATTTGAGATCAGCCCCATCTATGACATCCCTGCCACCGCA  
GTATATGGCGACACCACGATGGCATTAGAAATCCAGGGATCCAAAAGGATCTCAGCCAA  
AAGAAATTCTTAAATTTCTGTACATCCATCGGACTACCAGAAAAACAGCCATGTCGGTT  
GCGAACGCTGCACTGTTGGCAACAGAAAATGCCGAGAGACAATTTCTTGCTTCGGGAAAT  
TTTGATACACGGATGAATCGAGATCTGGCCAGGGTTCTCAAACATCGACGAAGCGCATGG  
GGAGCT

>RXA00222-downstream

TAATTGCGCTGTTTAAGAGGTCTG

>RXA00230-upstream

AGGTCTTACCGCCCCCTCAAATCCTGCAGATTTTCCGTCGTCAATCAGGGACGAAAGTACA  
TCCTATCTATCTAGCTCCACTAGCACAGATAGGAACTCCG

>RXA00230

TTGATTTCATGAGCAAGACGTTTCTAGAAGCTGTTAAACTACATCACTTTCACACTTTGGTGTT  
GACCCTGAAAGATGGTTTCATCCTGAAGGCTACCAAAGCATTGCCCTAGCGATTCTTGAC  
TCCATTTACTCGACTGGTAATCGCTATACAGGTGTACTCAACCTTGTCAATCGATACTGC  
GGGCTGCGCGCAAATGAAGGATCACACCCTGAAGCCGATACTGCCACTGATCTCATCGAG  
ACATTCTACCGGTGGGGAGGGTTCGACGAATTTGTTCTCAAACGAATAATCGGTGGAGA

ACTTCCTCCAAGATTACGACACCCTATAAGGCATACGCAGCTTTGGAAGCAGCAAAGGTA  
CTTGCGGGTCATTCCATCGAATCCATCAGCGATGTTGTGCGGCAGGTTTCGATTTCGCGCGAA  
AGCCGTGAACACTCAGATATCGCGAGAGAATGGTTGATGATAACCGGCCAAAGTAGTGCG  
TTGACCTGGAGTTACTTCCTTATGCTCGTAGGTGTCCCAGGAGTGAAAGCAGACCGAATG  
ATCGTCCGTTTCGTCACTCACGTGCTCGAGCGTCCGAAAGAGATTTCCAGGCACGAAGCT  
TCACGGTTGATTGAGGAAGTTGCGGACATTATGTGCGTCAACTACATCTACCTCGACCAC  
ACCATCTGGCGGTTCCAATCAGGGCGCCCCCTACCTCCAAGAAGACTCCTCCCCCTTTCGAA

>RXA00230-downstream  
TAAATCCATCACATTTTCACAGTC

>RXA00232-upstream  
GCTGAAAAAACTCCCATTTGGACAATGAACACTTGTCAAAATGGGAGTTTTCGGATTTTCG  
CACCACCGGCAGCACTCGAAAACGTGTTTATACCTTGAACCT

>RXA00232  
ATGAACGACAGGGCTCACCAACGAATAGGCGACATCGAGCGATCCCAAGCCCTCGACCGA  
CTTGGGTTCATATTTTGCAGACGGATACCTCGACATCGACGAATTCGATACCCGAACCGGC  
GCCGCAGCAATCGCACGCACAGCCGGTGAAAATAGATGTCTTGTTCACAGATCTTCCCGAA  
CAACAGGCAAGCACCGCCGTGACACCCGTGCAAGACGATACCGAGAAAGAATTAGACCTG  
GTCTACAGCGAGGAAAGAAGCTCAAGCAGATCGACTCCGCCATTTGGGCTGTCTGTGATG  
GTCTCGTTCTTCTAGGCTTGTGTTTTCACGTCGCATATTTCTGGGTTGTGTTTCATC  
CTTGGCGGAGCGGCCCTCCGCGGGTGCGCGATTCTTGCTCAAAGTAGATGACGCCGATGAA  
AAACTCTTTGAGGAACTCCACAGCAAGGAACAAAGCGAACGCGAAGCACGCCCTACGCATT  
GCGGCACAACGTGACGCGAGTTGGAACAA

>RXA00232-downstream  
TAGCCACAAAAGCTATC

>RXA00233-upstream  
CGCCTCCAGCAGTTGAGGGAGAAGTTCCAACACTTGCACCAACTGAGGAAGCAACTGTGC  
AATAGCGCTTTAGACACAGACTCATGACAGAATAGAAGAC

>RXA00233  
ATGAGTGTGAATGAAGCAGATCTGAACGCTGTGCAAGAGCAATTGGGAAGGGCCCCACGA  
GGTGTCTCGATATTTCTTACCGCAGCCCTGATGGAGTACCCGGTGTGGTGATGACCGCA  
CCAAAACCTGGATGACGGAACCCCATTTCCCAACCCTGTACTACTTGACAGATCCACGCCTG  
ACCACCGAGGCATCCCGCCTCGAGGTCGCATTGGTAATGAAGTGGATGACTGATCGCCTT  
TCCACCGACGAAGAGCTTCGTGCCGACTACCAGCGCGCCACGAGCACTTCTGGCAAAG  
CGCAACGCAATTGAAGATCTCGGCACGGATTTTTCGGCGGTGGCATGCCTGACCGAGTG  
AAGTGCCTTCACGTCCTCATTTGACTATGCACTGGCAGAAGGCCACACCATTTCCTT

>RXA00234-upstream  
TTCAGGGCTAAATAAAAGCGCTTTTCGACGCCCCGTAACCTCAAGGTTGCCGGGCGTCGT  
TGCCTTACTACTGTTACTGGTGTGACTATGATCGAGGATT

>RXA00234  
ATGGCAAAGCAGAAGAAAACCTCATAAAGGCCTTGTTCTCTGTCTCAAGCAGGGAACGTGCT  
TCAGAGTCAGTTTCTGCTACCCGCGCCCCATTTAGATTGGGTGCCGTCGGCATCGGTGCA  
ATCGCACTCGTAGTTCTTCTCATCCTGTTTGTCTATCGCGATTCTGTGCGTAACATATTTT  
CAGCTGCGCTCCGACATCGCCCAAACAGAGGCTTCCATTGAAGCCAAAGAACAACAGATC  
AAACAACCTGGAATCTGACCTCAACAGGTACCAATCAGAGGCGTACATCCGCGAACAAGCA  
CGCCTGCGCCTAGGCGTCAATTGAACCTGGAGAAACCGGTTTCAGAACTCGTGACCCAGCA  
CTAGATACCGACACCTCAGTCACCTCTGACGGCAACGAAGAGAAACCACTGGGAGCTTGG  
TATGAAAACCTCTGGGACTCAGTCACCAAGCCAGAAGCACTCGGCGAAGAGGAAATTGCG  
CCTCCAGCAGTTGAGGGAGAAGTTCCAACACTTGCACCAACTGAGGAAGCAACTGTGCAA

>RXA00234-downstream

TAGCGCTTTAGACACAGACTCAT

>RXA00236-upstream

AATGCGAGAGTTCTAAAACGAGCCGGTAACATCGACCCCATGAGTTCAGGGGTAGAAA  
AGCAATGGGATTTGGATGCGGTTTCGGTTTGGCCGTCATC

>RXA00236

ATGGTGATCTCATTGTGGATGGGCGCTCAGCTTCATGGATGGAACGGCACCTATTCGC  
CACTCCAGCAAATCCCTGAAGATGTTCCGCCGGCGCTGGTGTAGAAGTCCGCAAATT  
GATACAGAGGCAGATGGAGCAGCATCCAACCATTTGCGTTTTTGGGCGGAACCAATTGCT  
CAAGATACTGGTGTGTCCGCTCAAGCGATTGCGGCTTATGGAAACGCAGAGCTCATCGCG  
AGTACTGCGTGCCCTGGCTGCAATCTGGGGTGAATACCTTGGCAGGTATCGGCCAGGTG  
GAAACCCGTCACGGTACCTACAACGGCAAATGTTTCGGGGCAGTTCCTGGATGAAAAT  
GGAGTTGCAACCCCTCCAATCATCGGCGTTCCTACTTGATGGTTCACCGGGTTTGC GGAA  
ATTCCCGACACTGATGGTGGGGAATTAGATGGCGATACTGAATATGATCGCGCGGTAGGT  
CCCATGCAGTTCATTCCGGAAACGTGGCGACTTATGGGATTGGATGCAAACGGTGATGGG  
GTAGCGGACCCCAACCAAATTGATGACGCAGCATTGAGTGCCGCAAACCTGTTGTGTTC  
AACGATCGTGACTTGTCCACTCCTGAAGGATGGACCGCAGCTGTTTATTCTTACAACATG  
TCTAATCAGTATTTGATGGACGTTTCGAGATGCTGCCGCGTCCTACGCTTTACGACAGCCG  
CGGATC

>RXA00236-downstream

TAAAACCTTAAACAAGCGCAACCCC

>RXA00237-upstream

ACTGGTAGAAGCTTTGATGATCTACATCACAAATTTACAATGTGTGGTGAGTTATTCATA  
TTACCCAAGGACTTAAACCTTAAAAGGAGCCCTAAAAATC

>RXA00237

ATGAAGCTTTCACACCGCATCGCAGCAATGGCAGCAACCGCAGGCATCACAGTGGCAGCA  
TTCGCAGCACCTGCTTCCGCATCCGACTTCGCAAACCTATCCTCCACCAACAAAGAACTG  
TCCCTCAGTACAACCTGGGTGCTTGCGGCATCCTTGAGGGTGGCTCAAAGCAGCTGGC  
GTCCTTGAAGAAGGCCAGTACAACCGCGAGCTCGCAGAAGCAATCGCCGCAAAGGGTGAA  
GGCTTCTGGACCACTCAGTTCCACAAATCGGTGATTGGAACGAAGATCAGGCAGCAGCA  
CTTGCCGACCGCGCACAAACCTGTGGCTAGTTAAGGCTGACACCTACCTTTCTGAGCTG  
TCCTCCAACCTCTCTTCC

>RXA00237-downstream

TAAAAGGTTCCGGGGTAACCCCA

>RXA00238-upstream

AACAGTCACATAAATCACTTCAGTAACGTATGATTTTGGACTGTTGTGGCTTTTGCCATA  
TTTATTTTCAATTTCCATCTCAGTGATCTCTTAAGGAAACCC

>RXA00238

ATGAAGAAACTACGTTTCGCCACCATCGCTGCCGCTACCGTTGCCCTGACTGCGAGCCTT  
ACCCCTCAGCTTCCGCACAGGATTTCAACCAAATCATCGACAACCTTTGATTGCGGCATC  
CTTCAGACCGCTATCTACACCACCGGCCTGGCTCACGAGAACTCCACTCGCTCAGAGCTC  
GCCGCTAATCTGCGCAACTCCGCAGCTGTGGGCCAACTAGACTTCCCATTTGAATATCGCG  
GCTACCGGCTACTCCGAGCGCATCGCTAACCGCGCACTGACCTGCGGAATCGTGAAGGAA  
GATCCACAGGACTTCCTCTCCAGCTGCAGCTTCTGTCTCTAACCTATCTTCTTCCTTC  
TTCCTGCT

>RXA00238-downstream

TAGTTTCTCTTGGGCTTTTCCTT

>RXA00239-upstream

ACAAAGCGGATCAGATTAACAAGGTCCGTGACGCTGTCGATGAGCGCATTGGCAAAAACA  
ACGGCGGCGAAGAGAATCCAGCCAAC TAGTATTAGGCGTC

>RXA00239

ATGCGCGTCGTAGTTGTTGATCCTAAACACCCCGTCCTTCCAGTCTCTTTTCCTCGAGGCT  
GTTCTTGGGCGGGTGAACCTGTTTCTATCGATCCCGATTTTCCATTTGATATTGAAAAA  
TGGGGGATCAAGACGTCGACAAGCGCCTCCTGGTTTATCATCGCAAAACCGCAAAGCACG  
CTGCTTATCGACGCGCCCTCAACCTTTGTCATGAGGCGTCGGCGTCATGCGGGCGGCC  
GTGGGCGCGGCGAGTGGGAACGCACGCAAACCCATGAGAGTTTGATTCCGTATCTGGAA  
GAAGAATCGCAGGAGTTTATTGAAGCGATTTCATGGTGGCGATGATGAGCACATGAAAAGC  
GAAC TGGGGGATGTTTTGCTGCGAGTGCTTTTTCATGCAGAAATCGCCGCCCGTCAGGGT  
CGATTCGACATTTTTGACGTGGCGGCGAGTTTCGTAGCCAAGATGCAATCTCGTTCGCCG  
TACCTGTTTCGACGGCTCTACCGGAATTGTGGACACCGACGAGCAGCAGCGGCTGTGGGCT  
CAAGGAAAAGCCCAAGAGAACTAAGCAGTGAAGAAGGAAGAAGA

>RXA00239-downstream

TAGGTTAGAGGACAGAAGCTGCA

>RXA00240-upstream

TCATTTAACGTAGTTGACGTACGGCGAAGTCGCTAAACTTCGCGTAATCTTGGGGCCAAT  
TAATCAAGTGCAGATGAATTGTTTAGAAAGGCTGGAGACC

>RXA00240

ATGGGTATTTTTGACGAAGCTAAGAAGAAGGCAACCGAATTCCTCGACTCTGATTTCAGGC  
GAGCAGAAGTCCGATGGACTGCTGGATAAGGCCGAGACAAAGCTAAGGGTCTCCTCGGT  
GAAGACAAAGCGGATCAGATTAACAAGGTCCGTGACGCTGTCGATGAGCGCATTGGCAAA  
ACAACGGCGGCGAAGAGAATCCAGCCAAC

>RXA00240-downstream

TAGTATTAGGCGTCATGCGCGTC

>RXA00242-upstream

GGATCACTATCGCTTTAAACACCGAAACCTTCCTGCTAGTTACCAAGATTTTTAAGTTT  
TACCGCAATTTCTTGAGAGCTTTGGGAGGATAATGGCGGT

>RXA00242

GTGAATGAATGGCGAACAGTCTCGCTTGTAGATTCCACGGCGCTGACCGTGATCATCAGT  
GTGGCCGTGTTTACTTCTGCTGTGGCTCTGCTCGGAGTTGTGAAAAAGCGCTCTCGGTGG  
CGGGTTCTCGGAGCTCTCATCTCCTCAGCAGTTCTCACCAGTGGCGCATGGGTGGTTATT  
GAAAAGCTGTGGAAGCCTTTCCCCGACCCCAATCCGTGGACCATCTATCTTTCCGCTGGT  
TTGGCGGTTTTTCTCTGTGAGCATCTTGTTCGCACTGGTCGTACAAGAATACTGATG  
GCTACACTCACCGTGATTGCACTGGTTAATACGGCCGCGAGTCATCAATGTCATCTACCAG  
CCATACCCGACGTTGGGTTCTTTCAATCCCGTGCCAACGGCTGTGTCCATGTGCGTATGCA  
GATTTTGAATCTCAGACCACTGCCCCGACGATGGATGACCGTGAAAGTCGGTGCCCTTGTG  
CAGGTGCCGCTAGCTGGAACAACAGATGATTCCACCTCCGGCTTTGATGCGCGCGATGCC  
TACGCCTATATTTCCGCCTGCGTATTGGGATAATCCTTCCCTACAAC TGCCAGTTTGGTT  
CTCATGCCCGGAAACCCCGGCCAGCCAGATCAGTGGTTTAGCAGTGGAATGCCGATCAA  
ACAGCAGATAATTTCCAAGCAACCCACGATGGCATCAGCCCCATTGTCTATCAGCGTGGAT  
GGCACAGGATCATTCAGCGGAAACCTTGCTTGCGTGGAATCTGATGCCCAAAGCGTGATG  
ACATATCTATCCCACGATGTCCCCTGTTGATCAAACAGAAATTCGAGTCAATCAGGAT  
CAGCGCACCTGGACAATTGGTGGTTTAAGTTACGGCGGCACCTGTGCTTTGCAGATCATG  
ACCAATCACCCCGAAGCGTATGGTTCTTTTCTTGACTTCTCGGGCCAGGAAGAACCAACA  
CTTGGCACACGCCAGCAAACCTGTTGATCAGCTTTTTCGGCGGCGATGAAGACGCATTCAA  
GCCGTTAATCCGGAAGATCTGCTCAATCAAGCAATCAGCTCAGGAGCGCATACCTACAGC  
GGGATTTCCGGCAGGTTTATTGCTGGTAGCAACGATAAAAGTGCAAGTGCAGTGAGCGCGCTGTCT  
CATCTTGATAATTTGAGCAATCAGGCGGGCATGTCCACCACCTTTGATACCGTGCCGGT  
GGA

>RXA00244-upstream

AGTGGGAAAGTGATGATGCCACACACCGCCGGCGGATTACAGGATGGCAGTTCATCAGGG  
GTTTAAACAGTGAAGATTTGGCAGAAAGCGAGATGGATAA

>RXA00244

ATGAATGATCAGCTGTGGGAAGGCGACACTGGAACGCTGACTTTTGGGTCCAGGAAAGCT  
CTGGTGCAATTACTCAAAGGTCCCATGGTGAATGCTTTGCAGCATGTTGAAGTGTGGCGG  
GCTATCACCACAGATCAAGATGCGCTCAATGCTGTGCTTAACAATTTGTTCCTCGAGTTG  
GTTCTTGATGAGGATGCGGGTGTTCATTTACTCGGCCTGCCAATGGTAGACAAGAAGTA  
TTGGTTGGAAATAACAAAAGTGAAGCGATGCCCAAAGTGCTGCGCACGGAGACGCTGTTCG  
CATTTTGATACGTTGATCATTTTGATTCTGCGCCAAGAACTCACCATGGCGCCACCGGGG  
GAACGAGTCATTGTGGATCGTGAAGAAATCCGCGAACAAGTGTGCTCTACCGCGTTGAT  
GAAGAGCGAGATGAAGCCAAACTAGCTAAGCGATTTCGACGCTGCATTTAGGCGCATCGTG  
GATTATTCATTAGCTAAAAAGACAGAGACACCTGAACGTTTGGAGGTCTCACCAGCACTG  
CGCCAGATTTTTGATGCCGACACTGTGGCAGGTGTGCGCGCTGAGTACGAAAAATTTAAC  
AAAGCAGCCCATGATGGAAATGAAGAGGAACAGAAG

>RXA00244-downstream

TGACCAGCGAACAAGCTTTAGAT

>RXA00245-upstream

ATGACCTTTGTTTGAAGTTGGTGCGGTGATGGGGAGTGTGACCGGATTCGAACAGGAAT  
GTACGACACGTGTCCACCCCTTCTGGAATAGTCAATTGGC

>RXA00245

ATGACCGTTGTATCGCACGCGCTTGGGTTTAAGCGATTTAGGCAGGAATCCCTGGAGCTG  
TCTTTGTTGCGCAGTGACAACCTTCCGGTGGTGCTCGCCGTGGTAGCGCAGTATTTTCCG  
CAGGGGGCTATCGCTAAGCCGGCCCTCAGAGCTGTATCAGCTGCTCAGCGATGATTTTCGG  
GTGCTGCGTGAAGAAGGATTTGAGCTGCCGAAAAGCCCGTCGGATTATGTGAGTGATTGG  
GTGAAGTCCCGGTGGTTTGTGCGTTCGTCGGGTAGTTTCGCAGACTGGTGAGACCGTGGA  
CCGAGTGAAGAGCTGTTCGCGGTGCTGGATTTCGGTGCAGCGTGGGATAACCCGCATCGA  
AGCATTTTCGGCGTCTCGAATTGAATCGTTGACGCAGGCGTTGCAGACTTTGGCGTTGGAA  
TCGGACCCACGACAGCGAAACGTTTAGCTGAGTTAGAGCGTGAACGCGACAGGATTGAA  
CGCCAGATTGAAGCGGTCCACGCTGGTGAATTTGAAGTCCTCACCACCGTGCAGATTGGT  
GATCGGGTAGCAGATATTTTGGATCTAGCAGCATCTATTCCTGCAGATTTCCGCCAGGGTA  
AGGCATGAGCTGAGCGATCTGAACCGGAAGCTGCGCAGGCAGTTGCTTGATCCTGAAGAT  
TCCCGTGGTGATGTTTGGAAAGAGATCTTCAGGGGAGTTGATCTGATTGGGGATTCCGAT  
GCGGGGCGCAGCTCAATAGTTTCTTTGATGTTTTCGCTCGATCGGGAACGCTCAAGTCTG  
ATTGATCGATGGATCAGAGAAGTTCTGGGACGCGATGAGGCTATTGATCTGGATTCAAAA  
TTAAGGACAGGGCTGTACCGAATTTTCCGGGATATGGAGGATGCCAGCTTCGAGGTCAAC  
GGGGAAATGACAGGGCTGGCTCGAAGTTTTCGCTCACTATGTCACTACCGAGGAGTTTCGA  
GAGAGCCGACGCATGATTCAGTTGCTTCGCGATACCCGAGTGCCGCTGCTAAGGCCGCC  
GAGGCTGGTGAAGTGACCTCACTCAATCACATGGACACACCACTCGTGCGCATTGGTATG  
GATGTTTCGCTCGATTGCGGGGTTGAACTGAAGAACCAGGTGAAGAACGCGTCGAAGAT  
TTGCCTGAGCCAGTTGAAGAACAAGAACTAGACACTGAAGTCTTGATGGAACAAATTCGG  
GCAAGCGAGATTGATTTTGAAGGAATTGGAAGAGGCTGTTTCTTTAGTTCTTGCCGAGCAA  
TCGCACGCCACGATCACCGAGGTACTAGAACATTTCCCGGCAACGCAAGGTCTCGCCAGC  
ATTGTTGGATTGTTATACCTGGCGATGCGTGATGGTGTTCACAGGTTCGCGCGCAAATA  
GTGGAGTGGGAAAGTGATGATGCCACACACCGCCGGCGGATTACAGGATGGCAGTTCATC  
AGGGGTTTAAACAGTGAAGATTTGGCAGAAAGCGAGATGGATAAA

>RXA00245-downstream

TGAATGATCAGCTGTGGGAAGGC

>RXA00247-upstream

AACCCCTAACTACTGACCTCGCACCCTTGTGTGCAGCCCGTTACCACGCTGCATTGAGCG  
CACTGCTGGCACATATCTAAGACCGCTAAGGAAATCAGCT

>RXA00247



ATGCAGACATTAATCTTTATCGCCATTGACAGGCGTCGCAGCACAGCTTGTGATGGCGGC  
CTCGGCATGGGGTTTCGGCGTCACCTCAACCACCATCCTCATCATGCTCGCAGGTTTAGGC  
CCTGCGCAGGCATCCGCCGTCGTGCACACCGCAGAGGTTGGAACCACTTAGTTTCTGGT  
TTAAGCCACTGGAAATTTGGCAACGTGGATTGGAAAGTAGTTGTCCGGCTCGGTATCCCC  
GGCGCTATCGGCGCATTTGCTGGCGCTACCTTCTTGTCCAATATTTCCACCGAAGCAGCA  
GCACCGATCACCTCCCTGATTCTTGCCCTGATCGGCATGAACCTAGTCTGGCGATTTCAGC  
AAGGGACGCATCCGCCGCGACTATTCCGATCGCCCGCACAGCAGGGGATTCTCGGCGGA  
CTCGGTATTGTCTGGTGGTTTCGTGACGCATCCGGTGGCGGCGGATGGGGTCCAGTGACC  
ACCTCTACGCTGTGTCTTTGGGACGCACCGAACCCCGCAAAGTAGTCCGCACCGTCAAC  
ACCGCAGAATTCTTAGTCTCCCTAGCCGCAACATTGGGCTTCGTCTGTTGGGACTGTGGGAT  
GACCTAGTAGCTAACCTCTCTGCAGTTCTCGCGTTGCTCATCGGCGGCGCAATCGCAGCA  
CCAATCGGCGCCTGGATGATCTCTCGCGTTAATGCAACCGTCTCGGTGGCTTCGTGGGC  
ACCTGATTGTACACTGAACCTGCCAAAGGTGCTCAACGTGGTTGGCCTTGATTTTCATC  
CCCACCGGCTCATCCAGGTCACCGTCTCTCATCGGCGTCCGCTGACGTACCTCGGC  
TTCCGCGCTACCGCAAAAATCTCTCAACGAGACCATCTCCAGCGAAGTTGTCTCCGAA  
CAAAGGGCCAAAAGATTAAAAGCACT

>RXA00247-downstream  
TAAAACACGCTTTTCGACGCCCA

>RXA00248-upstream  
TCCGGCGATACCTCGCAGCTGGCTTGGTTGGCCACCGCTACGCAATAACTGGTCGATC  
TAGACCAGTGTCTTAGGCAAGACCCCATTTAGGACACCTC

>RXA00248  
ATGATTCCCCTGATTACGCTTTCCACGGTTCCCGCAAAAAGTCCGCAGCTGCAGGCATT  
ACTGCGCTGACTCATGAGGCCGGACGAATGCTGGAAACACCAGCCGTGGAAGCGCATTTA  
GAGCTTGCTGAACCTTCCCTTGATCAGGTTGTGGCAACGCTCAGTGCGGAAGGTGTAACC  
AGGGCAGCGTTGGTTCTTTGCTGTTTAGCAATGCGTATCACGCAAAGATTGACGTTCTT  
GAGGCAGTAAAGATGCTTCAGAAAAGTATGGTGTGGAACCTCTCGTGGGTCCGCATTTG  
GGCACTGGCTCCGATGTAGCCAGCGTGCTTGCGCAGCGGTTGAGTGCGGACGCCCCACA  
GATGCCCATGTGATTTTGTATTCCGTTGGCAGCTCACACGTGTCCGCCAATGAATCAGTC  
ATCGATCTTGCCACACCATTTGCTCTCCTCACTGGCTTTTTCGGTTGAGGTGGTGCCCGCT  
ACCGGTGGGCCAGGTGCCGGCGGCGCCGAGTAATAGAGGTGGCCTCGAAACACAAGGCC  
GTCCACATCCTGCCGCTGTTTGTACGGAAGGTTTGTGCTGCTGGATCGGGCTATTGATCAA  
TCCGCCAACATCGCAGCTGCCACCGGCACAACTTCACCTATTCCGAACCCCTAACACT  
GACCTCGCACCACTTGTGTCAGCCCGTTACCACGCTGCATTGAGCGCACTGCTGGCACAT  
ATC

>RXA00248-downstream  
TAAGACCGCTAAGGAAATCAGCT

>RXA00250  
GCTTTGGGTGCTGCGTTGGGTCAGTTCGATTTCTGTCGCAACAATATTGATCTGATTTTC  
TTGCTGATCGTGTTTCATTTCCGGTGGTTTCTGGTTTGGTCGGCATGGCCCGCAAGCTGGCT  
GACGGCCACAAGCAAGCCAACACCGAGCCACAAGAAAACCCCGCAGTCCAGACAGCCCCA  
GTAAAAACCCAGGAAGCCCAGGAAGCCCCCAGAAC

>RXA00250-downstream  
TAATCTTTCCGGTCCGCCAGTTC

>RXA00252-upstream  
GCAGCATGGGGGTGTTGGTGGGGCCGGGGCTGACAGTGCTGACGCGGATGCCGTTGTTGG  
CTTCTTCTTTGCGGAAGGCGTCGGCGAGTCCGCGGAGGGC

>RXA00252  
GTGTTTGGTGGCGGCGTAGATGGTGTGCGGGGGTGGTCCGTTGCCGGCGCCGGAGTT  
GATGTAGATGACGCAGCCGATGCCGCGCGGAGGGCGGGCAAGAGTTGGCGACTCAACTC

GGCCGGGACAATGACGTTGAGATCAAGGTGTGCGTGCCATTTCGGCCACACTGCCGGCTTC  
GATGGTTCGTGTACGCGCCACCGCCGCGGCGTGCACCAGCGTATCCACGTGGTCGAGGTT  
TTT

>RXA00252-downstream  
TAGCTTGTCGACGCCTCCCTCTT

>RXA00256-upstream  
AATTAATCAATCAGAAAAACATATTGAATACTTATAAATTTCTGACATACTCATTAATGA  
GATATTGCAAGTCTTTATCAAAATGATTAACAAAAGGAGT

>RXA00256  
ATGTTTATGTCGCTAAAAACTCGCCGAATATTCGGCGCACTTGCTGTTTCGCTATCAATC  
TCTTTCTCAGCCATTGCTACACCTGCAGCATCCGCACAAGAACTAGTGGTGAGCACATCA  
GCAGTAAACGAATTTGGTGTAGTTACCAGTGACATCACGGCTGAGCAAATTCCTCAGGCG  
CAAGATCTAATCGCTGAGATGAAACAGTCAGAGGACATATATGAGTATTTTCGGTGCCTTG  
TCTGACGTTGAACAGAGATCCATCATTCGAGCTGTAAAGGAAAATCCATATCTCATTGAG  
AACGAATCACCCCGTATGAGAGTCCAAAGTGAAACACCCGACGAGGAAACACCTGATAAG  
AAAAAGCCGAGCAAAACCTACAAGCTCTATATGAGCATTCTCGAAATGATGTCATGTATC  
AATCTTGTGTGATGTTCCGTCATGTGCCAAGCCCTTAAAGCGGCAAATATAGCTGAACGC  
GAGGCCAAGGCCCGTTACCCCGATTTCGGTCACTAATGGTAAAGGCGATGCCCTTCGTCAT  
TGTGCATGGAGCGCTCTCATGACTATTCTGAATCGGAAAAGATGCAGCCGAAAGAATTGGT  
AACGCTCATGAAACCGTTGTGAGAGGTGAACCCGAAGAAAGAGAAATGGATCTCATCAAT  
AACGCGCTGGGTAGAGACATCGGCGAAAGATTTCATCATCAATGGCGATGAAACGGGTGCG  
CTCAGTACTTGTGTATCCATGGCTAATATCGGGCTACTTCATACTCTGTTG

>RXA00256-downstream  
TAAACAAAGGAAGTTTCTATCAT

>RXA00257-upstream  
CATCATCAATGGCGATGAAACGGGTGCGCTCAGTACTTGTGTATCCATGGCTAATATCGG  
GCTACTTCATACTCTGTTGTAAACAAAGGAAGTTTCTATC

>RXA00257  
ATGAAAATCAAGAAATTCAGCATCACAGCGCTAGCCTCAGTTCTAATGCTCACGGGTTGC  
GCGACCAATCACAGCTCACCTCTGTACAGTTATCTGAATGCGTCAACATCAACCACTGTT  
GAACAAGTACGTCTCAGCGATCTTTACGGTGAGCAGTGGACCGAGTTCGCTCTTGTCTGC  
CCCTACACCACAAAAGACGAGGTAAAAGAAGAGCTTGGTATAAAAAATAAACACCTACCTC  
ACCGATTTCGACCGATGACAGTAGTAACGATATTGTGCTCAGGGATAAAGACGGTTCATAT  
GATTGGATCTATTTCAACAGATTTCGACATTGTGTACCTCTGCAACGGCTCAGCGGAAAAT  
CTAAAAATCTACCCCATTGATTTCAGTTCTAGAATTTGAGCATAGAGACGACTACGGTACC  
TGGAAGTGTGAGCGCTATCACAGAGCCGGGTAATCAA

>RXA00257-downstream  
TAATAACGCGGACACTTAAGTAC

>RXA00258-upstream  
TAATTAATATAATTAATGTAGTTTATTAACCTATTATGCAATGACATTTTTTAATAATTA  
ACCACGTCAACATTTCTCTCAGATCACAGAGGTTTCGCTC

>RXA00258  
ATGCGCCACACCACGTCAGCCACATCAACTACATCTATTATTAAGCGTGCTATGACCATT  
AGTGCCGCTGTTCTTATTGCCAGCGCTGTTGGTCTCACAACCAGCGCAAGTTCGCTCAAT  
ACTCTCAGCGCTACATCACCTGAATCACCCGATCAGGCAGCCACTGTGTACAGGCTGAA  
TCAGATAGTGAATTAGATGACGGCATGAAAAAGCTTGCAACCAAGATCCTTAATCGCGCT  
GACAACGCTGAAAAATAATGATGACACCGGCAAAAACCTCAACAATGATGATAAGAAGCTC  
AACACGAAGCAGCCGACGCGCTGCTGAAAAAGTTGCCAGGCGATCGAGCTAAGCCTT

GATACCACCACGAATGCAGAAAAGCCTGATAAAAGTTTTACCATGAAAAACCCGTAAAC  
GCCTATGTCACAAGTGTGACGTACAACAAAAGCAATGACACCTGGACTATCAAACCATCA  
GACAGCGCGGTGAATACACCGACCAATGATGCTGAGCGCATCAGCAATATCATCCAAGAA  
GCTCGCGACCTCGGTCTCAGCGACGATGAATCCTTGACGCAACAGATCGCATTTACAGCT  
CATGCTGCTAATTATTTAGTCACCGAATGGGTACTTCGCGGCTATCAGCTTGCTAACCCG  
AAGGTGCTTCCA

>RXA00258-downstream  
TGAGAAAACAACGACGCATGATG

>RXA00260-upstream  
GCAACAGCGGCTTGACAGATCAGAAGGCGCGAGAGGCGGACAGCTGCTAGATATTGAACG  
TCAGCAGGTGATTGCAGATCGCTATGGGCCGTTGGTGAAT

>RXA00260  
ATGCATAGCGACGCTGTGCTAGCGGGTGCTTCAATAAGAGCAAAAATAGGTGCTCTCGCA  
ACTATTTACGGTGCTCAAACTTAGAGAATGTCATTCACTCAGTTAGTTTTACTGACAGA  
CGTATTTCTCCCGATGGACAACGTGTCGAAAGAATTATTTTCGCGAAGCTTGGAGCGCAAAC  
CTTCTTATCCCTGATCCATCTTCTGATGTGGAAGCGTTTTCGCTGGAGCGAAAAGAAATCC  
ACTGAGCTAGCGGGAGGCATATTCGTTGAGAAAATGCTATTTACTGTCCCGGACACAGGC  
CGCTCCAATAACCGTGTCAGAGCTTCTCAGAAGAATTCGTAACCACATTTCTTTGAAA  
GATATGTATTTCTACACAACGTGAAGAGCTATTAGACCTTGCTTACGAGCTCATGGTGGGG  
GAAGCAGTACGTTTTTGCTAACTTCCGCCCTTTATGATCAGAATCTCCACCACCTACTGAA  
GCAAATATAGACAAATTGAGAGCCCATCTACGTGAGGCGCAGCTAGTGCGTCACTAGGA  
GTGTATATCTAATGGTGTGGCGATCTGTAAAAGACGCAGCTGCAGCGCACACTAAACAT  
ACAAGAATGAGCAAAGAAAATGCGACAACGCATAGTGTTACAAAAGTTTCTATCTTTGTT  
GACCAATTATTAAGCGGAACATTCCTTGTTCAAAGCCTTTTCACGAATCTTCACAAGTC  
CCACTGAGTGAAGCCACCAAGATAGTTTAAATTTGATTATGGAGTCACCCGCCGATGGAA  
ACTGAGCCGAGTGTGCTGCGAAATTCCTTCCAAGAACACTCGGATTGGGAGCTATTGCAA  
CAGTGTGATGAGAAGATTCTGATCGGGAGTTTCTGATGGAGTGGTTATATCAAGAACAG  
ACGTGGACTGCAGAGCAATTTTGTGATGCTCTAGCTATGGTTTCTTCTAGCGAGTTTCGT  
ATATGTGCACCTGGATGTGCGCATCAAGTAAGTGCAGACATCGCTACACAAGTCTTAGAA  
TTCCACGATCGAGTGTCTTTCCATGACGATCGTAAAAGCGCCATGCTTGCTGCTGAAGCA  
ACTATTATTGGTAACAAAATTGGTTCACAAGCACGGGCCGGAGACTTTGTTTTAGGTGAA  
GTAATCACCAAGCTGCAGAACATACCTGGTGAGGTA

>RXA00260-downstream  
TAACTTCTGCGTCGTCCAATTAG

>RXA00261-upstream  
AAGGTCAGCCGATTTTCGGTCAGTCAGCAACTAATTACGCTTATCTCCGTGTACGATAG  
ACCGTAGTTAACATAAGGAATGGAATAGGAGAATTGCGGC

>RXA00261  
ATGTATTCGACAAGCTGATTCTCTTGTTCCTTTCTGAGCAGGATTCAAGCTATGAATGC  
TGCGTAGGTTTATTAGATGGCTCAGATGGACGTGATTATATTGAAAAGCTTCTGAAGGGT  
AGGAAGCTGAAGAACCATTTTCTTGAATGGGAAGATATTAACAAGGCTGATGTTGCTCGT  
GAAGAAATATATAAAGGGCAATTGGTGCATCTGGTGTGTTGTGACGGCTCTTTCCACGCCT  
GGTGAAATTTCTTTTGTGTTTCCAGGTCAATCTCTCATGAGTGCAACACTCGAAGAAGAC  
TTTGCTGCACTTGTGCTCGAAGAGGAGCGCACATCATTTAGACCTGATCTGTCTCACTTG  
TGGTCACTCCCCGTAGGGTGGGTAGCTCCGGGGCTTGAGGGTTTCGTGGAGCGTAATTCA  
GAGGCAGCT

>RXA00261-downstream  
TGAACCACCGCTCTTTGAGCCGG

>RXA00264-upstream  
AAACCGGAAGGGCCSGTTTACTCCCCTACTTGGCGCAGAAATCCACATCAATCCAGGTGA

AGCAGTCATCTTTGATGTTGATCCACGTTTGAACACGGT

>RXA00264

TTGCTTGTCTGATTCCGGCGACGTCCAAGTAGAAGGCGTCACCGTCGAGCCCCACCCAGCTG  
GCCCTACACCGGCATCAATGAAACCCCACTCCGAATCCGTAACATCGGCACCACACCGGCG  
CGTACTGTACTGCTAGGTGGCGAACCATTACCGAAGACATCGTGATGTGGTGGAACCTC  
ATTGGCCGCGAGCCATGAAGAAATTGCCGAGTACCGTAAACAGTGGCAGGCCGAAGCTGAT  
CGTTTTGGTATCACCCACGGATATATCAGCCACCACAAAGATGGGCTCACCAGGCTTCCA  
GCACCCGAGCTTCCCAACGCTGCTATCAAGGCACGTAAAAACCCAGCACCAACTGCACGA  
CCAGAAACGAGAATTGAT

>RXA00264-downstream

TAAATGCGCTCCGCTCACGGCCC

>RXA00267-upstream

CGTAGCGTTGAGAACTATGCGAACTCTAAGTCTGGCCTGGCCTTTTCCGCAGCTGCACT  
ATTTT

>RXA00267

GTGTCTGTCTGCGGTAATCACTCGTATTGCAAGTTCCCATCATTTATCGCTATTGTGGCG  
ATCATCGTGGCTGCGATCGCACTTTTGTGGGTCTGAACAGTCTGTGGGAACAAAGCTT  
GTTGATCAGCCAGTGGTGTTCACCCAGGAACAAATTGATCAATTGAAAGAGTTGAAATCC  
CGCGACCAGGAGGCGGCAGCGATCCGTCAGGCGCAGCTGTGGAGTAGGGGATCGTCCAGC  
GAAGCGGTCTGCAGAGGCTGTGAGGAAGCTC

>RXA00267-downstream

TAAGTCGACTTAAGTGCGCGAAG

>RXA00271-upstream

TAGTTTAAATCATGAGACATTTACATATGGTTCTTTATCCGAGACATGTGTTGACGCTG  
TCTGCCCCTTTTTGAAAATAACACTTTAAGGAGATGTGCC

>RXA00271

ATGTTTTCTTCCCGTTCTGAAGGTACTCGCAAGCATCTTTACTGTTGGCGCCTTGGCGTTG  
GCTTCGTGCTCAAGCGATTCCAGTGACAGTCCACCTCCACTGATGCTGCAGGTGGCGAC  
TCTTACCGAGTTGGCATCAACCAGCTTGTTCAGCACCTGCACTTGATGTCAGCGACCACT  
GGTTTTCAAGGAAGCTTTTGAAGAGGCGAGGCGTTGACGTCACCTTTGATGAGCAAAACGCT  
AACGGCGAGCAGGGCACTGCACTGACTATTTCTCAGCAGTTTCGCTTCTGACAATTTGGAT  
CTCGTGTGGCTGTTGCAACTCCAGCAGCACAGGCAACTGCGCAGAATATCACTGATATC  
CCAGTCTGTTCACCGCAGTTACCGATGCAGTGTGCGCAGAGCTGGTGGATTCTAATGAA  
GCACCTGGCGGAAACGTCACCGGTACTTCTGATATCGCACCGATTGAGCAGCAGTTGGAG  
CTTTTGCAGCAGCTGGTTCCCTGACGCAAAGTCCATCGGCATCGTCTACGCGTCTGGTGAG  
GTCAACTCTCAGGTGCAGGTTCGATGAGGTCACCAAGGCTGCTGAGCCACTGGGGCTGTCC  
GTTAATACTCAGACTGTCACTACCGTGAACGAGATTACAGCAGGCTGTTGAAGCTCTCGGC  
GATGTTGATGTCATCTACGTTCCAACGACAACATGGTTGTTTCCGGTATTTCTTCTCTG  
GTTTCAGGTTGCTGAGCAGAAGCAGATCCCTGTGATCGGCGCTGAGTCCGGCACTGTTGAG  
GGTGGCGCACTGGCAACCTGGGTATCGATTACACCGAGCTTGGCCGCCAGACTGGTGAG  
ATGGCTCTGCGTATTCTGCAGGACGGCGAAGACCCAGCAACCATGCCTGTGGAGACTGCA  
ACTGAGTTACCTACGTGATCAACGAAGATGCAGCAGAGCGCCAGGGCGTGGAGATCCCT  
CAAGAGATTTTGGATAAGGCCGAACGCGTA

>RXA00271-downstream

TGATCGGCGCTTTTGAGTTCGGA

>RXA00272-upstream

ACCGATGCACCAGCCACCAACGCGTCCAAATCAATATCAGCCTGGCCCCACAAGGTGGAAT  
TCCAGTGGGTGGCCATCTGCCACAACCAGGTGCAGGGCAC

>RXA00272

ATGCCGGAACCAGAAACCTCCACGATGGGCTCCATCCAAAAGTCCGGTGAATGGCTCGTT  
CCTGCATATTCCGCATACAAGCTCAACGGTGTGACCTTTTCTTAGATATCCGCCATGCC  
ACCGCGGCTGCTCCTGTCAATTACCTTTGATGTCAACATGACCATGGGTTCATGACGCTG  
ATTGTTCCACCGGGTGTGTATGTGGAAGTGCAGATGGCTTCCAAGAACTGGTCGGATTTC  
AAGGTTCAACAACCAATCCTCTCCCGGTGCTCCCGAGTGTTCATCACTGGTGTGCA  
CGCGCATCAGGGTTGAAGGTTTTCACCAAGCATCCTCATGAGCCTTTTGGGTCTGGCAG  
AAAATGTTTGAG

>RXA00272-downstream

TAGCCTCGGGCCACGCCCCAACC

>RXA00273-upstream

TCGGTCTTGGTGGCGGCTCCGTCATTAGTTCCAGTAAGTAGTTTTTTCACCTCCCTGTTTT  
GAGTTTTTTTTCTCACCTTTATATAGATAAGGAATATTAC

>RXA00273

ATGTCTTTGAAGCTTAATTCTCGTCGTCCTTGCATCCATTGCTGTGCTGTGTCAGTCGGT  
GTCTCTGGTGTGTGCTGTGTTGGTGCGGCACCAGCTACGGCTCAGCAGGTAGGTGCTGGT  
ACCCCGATTACGTTGTCAACCTTGATCGCACCGTTGTTGATCCAGTGACTGGTGACATC  
ACCTTCCACTTCAACGACGGCACTTTTGTCAACCTCAAGGCGGGTGTGATGGCAAGGAT  
GGTACCGATGGCCAAGATGGTGTGATCGGCAAGGACGCAACCATGTTGATGTGCTACG  
GAGTCCAATGGTGATGTCAAGCTCACCTTCTCTGATGGCACCGTCGTCACCATTCCTGCA  
GCTAAGGACGGTGTGGATGGTGAAGATGGCAAGGATGGCGAGGACGCTACTGTGGTGTCT  
ACTGCGACTGACGCCAACGGCAATATCGTCATTACGTTCTCTGATGGCTCTGTGCTTGT  
GTTGCTAACGGTAAGGACGGCAACGATGGCTCAGACGGCCAGGATGGTGTGATGGTGAA  
AATGGCAAGGATGGTGAGAACGGCGCTAACGCGACCATGTCGATCAGATTGCCAATGAC  
GATGGTTCCATTACCATTTGTGTTCTCCGATGGTTCTGAGGTCACTATCCCAGCGCCAGCT  
AAGGGTGCCACCGATGAGCTGGCACAGTGTCTGTGTAACCCGAAGATGTTGCTGTGCGCA  
GCAATTCTCTGCTGACAGTGTATTGCTAACGCTGTGGCACCGCGATCCCACGTGTTGTT  
GAAGATGTGCGTGCACAGTTCAATCTTCCAAGCCTCAACCCCCAGTTTGATCAGTGGCTC  
TACAACGCGACCAAGGATATTGATGCAGGGTGTGTTGATCTCTGGTGCTACCGGCCTTGCT  
GTGCTGTGCGGTGCTCGCTGATGATTTCTGTGGCGACATTGATGCCGATGACAACGCAGAT  
GGTGACGTGGCGGCAGAAAAGCCAACCTGGCTCTTCTGGGCTTGGATCATCTGAACAGAGT  
GAAAAGGTTGATGGTGACGACGATAGTGTGATCGACACTGAAACTGATGCAGATCTCGAA  
GTAGAAGAAGACCCTGAGCTTGTTAACGCAGGT

>RXA00273-downstream

TAACGCCAGTGTAATGCTGGATT

>RXA00274-upstream

AGTTTAAAGTCATTAATTACTTTATGGGAAATAATAATTAAGTTTTTCATCTTTTAACTA  
GTTACAGCATGTTATTACCTTTTATGAAAGGCGTTTCACC

>RXA00274

TTGTCTCTTAATTTGAAGAAGAATTCTGCGCGTTCTATTACCGCGCTGACTGTTGCTGGT  
CTGGGTCTGTCTATTGTTCCCTGCGGCATCTGCACAGGATGTTGCGGATGACACTACCAAC  
TCCGATTCCACCCGTGATGCCATTTGTGCTGCTGCACCGCTTGTGTCAGGCGCAGCAGTG  
GGTGTGGTCTGCTGTCTCAGCAGCCAGAATTCCAGCATATGGTGTCCAGATTACGTCT  
GACGCACAGCGCATTTGGGCAGGATCTCAGCAATCAGTTCAACAACCTCTCTTGAATCGCTC  
AACATTGGCCTCGGTAACGGCGTGCACGGCCACAGCAGAACGCTGTGTCAGGGTATTGAT  
CTCACTGAAGCAGCACGAACCATGGCTGGATGGAATGACCTGGCGGCACAGGTGGGCCAG  
ACTGCAGGCCCTGCTATCGGCGCTGTTGCTGGTACTGCCGGCCTGATCGCACTGGTTGAC  
TACTGCTGGCTGGAAGGCTTCGACTTCGCGGGTGGCTCCAGTGGCACTGATGGTGAAAAAT  
GGTGTGATGGTCAAGATGGTACCTCGATCACCATTACTGAGATTAAGACTGATGATGAC  
GGCAATACCAATTGTTGTCTTTTCCGATGGTTCTGAAATCACCATCACCATGGTAAAGAC  
GGCGCTGCTATCACCATTGTTAATACTTACCGCGACGATGAAGGTAATACTGTTGTTGAG  
TTCTCTGACGGTTCCACCATTGTTATCGACAAGGGTGAAGACGGTAAAGATGGAGAAGAC  
GGCAAGGACGGCGAAGACGGTAAGGACCTTACCGTAACGATACCTACATCAACGATGAT

GGAGACACCGTTGTTGAGCTTTCCGATGGTTCACGATCATTGTAAAGAAGGGTACCGAT  
GGTAAGGACGGTGCTGACGGCTCTGACGGTGCTGATGGAGTCAGCATCACTGTGGAGAAC  
TCTTATGTTGATGCGGACGGCAACACTGTTGTGCAATTCTCCGATGGCTCCAATGTGACC  
ATCAACAAGGGTGAGAAGGGCGACAAGGGTGACGCTGGCGCCGATGGCGAAGACGGCGCA  
GATGGTGAATCAATTACTGTTGTTAACACCAGCAACGATGCTGAAGGCAACACTCTTGT  
GAGCTCTCCGATGGCACTGTTATTACCATTAATAAGGGTGATAAGGGTGACGCTGGCGCC  
GATGGTGAAGATGGAAGTAATGGCGCAGATGGCGAGTCCATTACGGTCATCGAAACCCGT  
TTCGATGCGGACGGCAACACTGTTGTGGTGTCTCGAACGGCACTGAAATCACCATCAAC  
AAGGGTGAGAAGGGCGACAAGGGAGATACCGGCGAAGACGGTAAGGACGGACTGACCCCG  
TACATCGGCCAGATGGTAACTGGTGGATCGGTGAGAACAACACCTGTACTGCTGCACGT  
GGCAATGACGGTAAAGACGGTGACACCCACGCATCGGTGATAATGGTAATTGGTGGATC  
GGCATCGTTGATACCGGCGTTCCTGCTCGTGGTCAGGATGGCGCCAACGGAGCCGATGGT  
GCTAACACCGTTGAGATCATTAATGGCTACTGGTACATCAATGGTGAAAAATACCGGTGTC  
AAGGCAGTTGGTGAAAAATGGCACCAACGGAGCCGATGGACAAGACGGTGAAAAATGGAACC  
AACGGTGCTAACACCGTTGAGATCAATTAATGGCTACTGGTACATCAATGGTGAAAAATACC  
GGTGTCAAGGCGCAGGGTCCAAAGGGCGATAAGGGTGACACTGGTGACACGGGCGCTCCG  
GGCGAGGGTTCCGGTAATGTGGACATTGAGATCCGAGAATCGAGTTATCCAGGTGGTGGC  
CAGGCCACCATCATCATTCTTGATCAATTTGAATATGAAATCCCGCACACTGTTATTGGT  
GACAACGGTAACTGGTACATCGGTGAAAAGGATACTGGTATCCCAGCTCAGGGTGGCACT  
GGAACACCTGGTGAGGATGGCCTCACACCACACATTGGCGACAACGGTAACTGGTGGATC  
GGTGATACCGATACAGGTGTCTCTGCAAGCCCGACCCCGTGGTGAGGCGGTAGCGGGT  
GTCACATGATGTGGTCTTCAACACATAGTGATGAACCAAGACCATTACTGCAACGATCAAT  
GGTGAAGAATATGATTACACCCCTCCACCACATAGTGCTGTTGTGTTCTACGCTACAGGT  
TCACCAATGGCATATTCTCTACCGAATGCATCGGGCCTCACTGTTATAGGTACTGAAGAG  
ACTCCTGGTTTTACCACTATTTCGATTTCAGTGACCATTCCACTGTGACCATTCCACATGGA  
CGAGATGGCACCAACGGTACTAACGAACGACGGTAAGGATGGTCTCACCCCGCACATCG  
GTGAGAACGGAACTGGTGGATCGGCGAAAAGGACACTGGTATTTGACAACCTTTGGCG  
GTGGCGGCAACCCCTGGTACCGGCAATGACTGCATCACGGTCCCAGGTGATGATCTTGGAT  
TCCCAGATGATGCTGAGGCCGGTGCAGAGACCGGTGCAGATGCCGAAGGTACTATTGACT  
AAAGGTCATAGAGCAACGACCATGACTGAT

>RXA00274-downstream  
TAAAGTCGGAACACAACCCCTAG

>RXA00275-upstream  
CTGACGCAGACGTTGCACAGCTCGCAACCGCTATTGACGAACAGAACCGCCCCACAAAGA  
GCTGTTCCCTACGGCAGATCGCAAGGAATATTGCTGCTGG

>RXA00275  
TTGGATAAGCGTCGCCCAGAAATTAAGCGACGATTTTCATCAAAGCTTTTGATGATTTTCCTT  
CATTCTTTTGCCTGCTGACAAAACAACGATCACCCCTATTGGCGCAATCACCGGTGCGC  
ACATCCACTGGCTATACAGGTACTTTTATCGGCATCCCCAATAATGAACCACTGTCCGAA  
GAGCCACCCCCACCATTTCATTTGTGCACGATAATCACACAGGGATAATCCACAGTTAC  
CCCGCACGAATGATTAATCTTAAATCTGAGCTCGGTTCGCTGAGATGATTCACGAGGCA  
ATCTGGGGGTACCCCATCAACAGCAGTTAATCTCATGGTATGAGACTTACTACACCAAC  
ATCTACTATGGTTTTAACCCACCCACTGAACCACATAAGAGTCTTGAGATTTTTTGCTCAA  
GACTTCTGTCTGACCCCAACAGAGAAACCTCCTTTTTTC

>RXA00275-downstream  
TAAGGCAAGGCCGTGGCACACA

>RXA00276-upstream  
GGCACACTACCCTATGACTACACCGCAACCCAGCAAACCTGCGCCATGGTCGCTTGCCTA  
TAAGTATCAAGCCATCAGCAATGATGATTTTGACAACCAT

>RXA00276  
ATGGATGACCTCAGCAGTCGCCAAGACCATGAAGCCTACGGCACGTACAACCCCGATAAC  
GGTGTGATGCCGATCATGTCATCGTGCCTTACCCCTATGAACCATATGATGATGCTGCG  
CCGATTGATCCTTTCGACTACGACGAAGATCTTCTCGATGAGATTAAAGAAGAGCGCGCT

GCACATGCGGTTGACGCACAAGTAACAGAAACAATAAGCTGACGCAGACGTTGCACAG  
CTCGCAACCGCTATTGACGAACAGAACCGCCCCACAAAGAGCTGTTCCCTACGGCAGATC  
GCAAGGAAGTATTGCGCTGGTTGGATAAGCGTCGCCCAGAAT

>RXA00276-downstream  
TAAGCGACGATTTTCATCAAAGCT

>RXA00279-upstream  
TGGGGAGCATTTCAGAGGTGCCCTAATCCTCTGGATGATTCTGCGGTGCAAAATTCAGCCCC  
ACATTCAGCCCCACATTCAGCTCGGACCCGGTTGGAGTTT

>RXA00279  
TTGGATACCGATGACTCGCCTGATCATTTGGCTTGATCCGTTAACGGAGAAGGATACTTCT  
AAGCGCACTCTCGTTAATTCGATTGTTTCAGGAACTTTTCGGCCAGCCTATTTTGTGGC  
CGCAAGATTTGGGCTTTCGTCATAACGTCGCGGGGCGGATGACGTTGATGACGATTATC  
ATTTTCGATCGCCATTTTGTCTGCTGGTTACGCCATGTGCGGTGTCTTCGGATACTAGGCAG  
TCCAATTTGGATGATTTGATCACTAATGCGGAGCCTGTTTCTATAACGCGCATGTGCTG  
TATACATCATTGTGCGTTGCTGATACCACTGCTACCACTGGTTTTGTTTCAGGCTGGTGTG  
GAGGGCCCGGTGAATCGGGTGAAGTATCACACTGCTATTGATCGTGCTGCGGTGCTGCT  
ACTCATACTGCGGCGTCTGCGGATAGTAGTAATGAGCATTTGATGGAGTTGGTGTGGAG  
ATTCAGCGTCAGTTGCCGCTGTATACGGGGTTGGTGGAAGTCTGCGACTAATAACCGT  
GCGGGTAATCCCGTGGGTGTGGCTTATATGTCTGAGGCCAGCGCGATGATGCGTAATGAA  
ATTTTGGCGATGGCGTCTGAGCTTTACAACCTGACGAGTCGTGCGGTGTCTGATCAGCAG  
CGTTTCGGTGACGGGTCCGCAGTGGTTTTCCGCTGTCTGGATTGCTTGCGGCTCTTGCCATG  
TTGATTGTTGCGCAGTGGTGGTTGATGCGGATTACGCGCAGGCGCATCAACAAGGGGTTT  
GCCCTGGCCACGGTGATGATGATGACGGCAACGTTATGGGTGTCAGCTGCAAACCTGGGCG  
ACGTGGCAGGCTGGCACGAAGGGTTTTGAGGAAGCGTCGGGGCCGTTGAATTCATGACT  
ACGGCTCGTATTTATGCGCAGCAGACCCGCACGACGGAGACGTTGTCTGTTGGTGCGTAGG  
CAGTCGATTACGGGCAGTGGCACTGGTTTTACCGCAACGATTATCAGATTAAGCGTGCG  
CTGGATGAGTATGAAACCACTGCGCAGTCAACAGACTCCGGAGCATCAGCAGTTGATTACG  
GCGATTGCTAATGCGATTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT  
GCGTCTGGTGATTACAACGGTGCGGTCAATGCGGTGCTCAACAAAGATGAGGAGGGCCAG  
ACCAGCTTTGATGAGCTCGATACTGCGCTGGCTGAGCTGATCGCGGATTCTCGCAGCTCC  
ATGCGTTCTTATATCCAGTCCGGGCTGCAGGCCACGGAGTTGGTGTCCGTCATGGTGATG  
ATTCTGTCTGTCTGCTTCTGTGTTGGCTTTGTGGGTGCGCATCCGCCCCCGTTTGCAGGAG  
TACTTA

>RXA00279-downstream  
TAAATGCACGCTTTTCGACGCCC

>RXA00282  
ATGAGCCGCGACGACCAGACGAACAACAACGGTGAGGGCGACGACACATCGCGCGAGCAG  
TCCTGGGATCAATCCTGGCAGAACCTAAATAAGGATTCCCAGTACGGTCCGACCTCGCAT  
CCGGAGGACGCGCCGGGAGGATTCCAGGGAAACGGCCAGGGTAACAGCCGGGGCAACGCT  
CAGGGCAATGGTCAGGGCAATGGTCAGGGCTTTGGCCCGGGTAATGCTTCGGGATATGGA  
GGCTACGGTCAGCCATACCCGCAGACTCCGTACCAGAATTCCCTACCAAGGTTATGGCGCT  
ACTTCACCGCAGAACGACGTGGCGCTGGAAGCGAGCAACGGCAAAGTCGACATCATGCGG  
GCGATTGCTTCGGATTCAAAGCCACGTTTGCCAATCCAGCAGTGTGGATTTTGGGCACC  
GTGCGTCTTGCCCTTGCGTTTCATGATTGTGAGTGGGTGCTTGGCTACTTATCATTTTTG  
ATCGACCCCTAATGCGGGCAGCAGACTTCTGGTTTTTCGGTTTCCGAGACCCTGTTGAAC  
GTAGCTATCGGAATCATACCTTCGCAATAACCATTTGCGTCATGCGCGGTGCACTGCTT  
TCTGTTGATGGACACAAAGTTCGCTTCGGTGATTTCTTTAAACCCATCAATGTTGGTCAA  
ACAGTGATTCTGATGGTGGGGCTGGGTATCTTCGGCATCATCTGGGCACCTTCACCACT  
TTTCTCACTCAAATCTGGTGTCTGTTAATGACGCTGCCGGTACCGTTGAGGTCAATAAC  
AGCGGTTTA

>RXA00283-upstream  
GAAGCTCCGTTTCATTTACGCCACTCTCTGGGCGGTGCGCAGGCTGATTCCGGTGGAGTTCT

ACGGAAAACGTCCACAGACCTCATTACCTGTGGTTTTGCG

>RXA00283

TTGGCATTGGCGTTTTTAGCGCGCTATGACGCCCTCATCATGGCCTTCGTAGCCATGTGG  
 ACTGTCGGATTTATGACATGGCGCGCACGATACCGCCGTGGCTTCCGCGACCGCATCGGA  
 TTCGCACTTGTCTGACATGCTGCTCCTCGTCTGGCCGATCGGCTTCGCCTTCGTGCGCTGG  
 ACTGGCGCCAGCTGGCTCACTACCGCGAACTCTTTGCCCAATTACCTCCACAGACGGC  
 AACGCTGCGATCATCGCAGCATCCGGCGGGCGGCCATAGGGCCCCAAGCGCTTTTCGAC  
 GCCTCCGTCCGCACCTTCCTCATCTCCCCAGCTCTCCTACTCGTCGCAGTAGTTGCAGTC  
 TTTTTTGCTTATCGACGCGCGACCCCGAACCATCATCCCCTTAGCTCTCATCGGCTCT  
 GTGGTGTCTTCCAAATCATTACCTACTCACTTGGATCTACCTTCGGCCTGCTGCGCTTT  
 TTCCTCACCGCCCTGCCGCTCACCATTATCTTGTGTTCCAAATTATCCCCGCCCGCCAC  
 CGATTCCTCTACTGCGACCAAGGTGCGTGCTACCGCGATCGCGTCACCGGCAAGTACGTG  
 CCAAAAACAATCACCGGTGTTTTAGTTCTCGCGATCTTCGGCGGCACCGGCATCACCTG  
 TACGGCATGAGCAGTGCTAACTGGGCGCCCCAGGAATATGCCATCCAAGAACTAGTTTTTC  
 AACATGGGATCGCCATCGCAGGACGCCGTCCACACCCTGAACACCTTCTCCACTGAAATG  
 GATGTCGCGGATTTTCGTGACTCCCTAAACCTTGGAGACGGCGAAGTCCTTCTCTCCACC  
 ACCTACGGCTTCGCCGCTCTCACCGCATCAAACAACCAAGCAATTCATCATCCCCTCC  
 GACGAAGACTTCATCACCAACCTCAACGAACCCGCTGAGCACGGCGTTAAGTACATCCTC  
 GCGCTCCACGCGAAGGTGCGGGCGCCACCGACCCGATCAACCTGCGCTACCCAGACATG  
 TATGAAACGGCGAGCCACATCGCCACGATGGAAATCGAATTCATCAATCAAGGCCAAGGA  
 CAACCAAATTGGCGCCTCTATCGGGTGCTCACCACACCTGAACAGTCG

>RXA00283-downstream

TAGACTCTTTGTAACTACCGTTG

>RXA00285

GGAAGTGAATTGGGCGCATTTGTTACTGCGTGTCCTCAACAGGGAAGAAATGATGGACAGA  
 TTCGCACGGGAGCTGGGTTTTTCGTGCGACAAGCAGCTTGAAGAGGTGAGCGCATCAAC  
 TGTCAACATAACTACACGGTCCAGGAGGAGCACTACGGCGAGACCATTGGGTCACCCGT  
 AAGGGTGCCGTGTTGGCGGACGAAGGCACGCCGGCGTTGATTCCGGGGTCGATGGGCACC  
 GCGTTCGTACGTGGGAGTGGAAGGGCAACGCCGAGGCACTGCGGTGCGCGCCGCATGGG  
 GCGGGCCGGAGGATGTACCGCAACCAGGCTAAAAAGCGCTTCTCGACGGCCGACCTGGAT  
 TCTCGGATGGCGGGCATCGTCTACCGGCCCGGCAAGGAGTGGATCGATGAAATTCCCGAC  
 GCTTACAAAGACATCGATCAGGTGATGGCCGATGCTGCCGATTTGGTGACAATTTCGCCAT  
 AAATTGCGCCAGATCGTCAACGTGAAAGGCACC

>RXA00285-downstream

TAAAGCGCATTACGGTAAAGTGC

>RXA00286-upstream

CCATAAATTGCGCCAGATCGTCAACGTGAAAGGCACCTAAAGCGCATTACGGTAAAGTGC  
 GAGAGGTATTTTGACGGGTTTAGATTGAGGGATGTGGATA

>RXA00286

GTGCTGAAAATCCACGGCTGCTTCTACGCCGTGTGCTTCCGGTACTCATCACCTTGGCG  
 CTCCTGTGCGGACTGGTGCTTGCGTGGTTTTATCTATCCTGCGAAGGCTGAGCCCCAAAAA  
 GATGATGTAGTTCTGGTGCTGGCCGGTTCCAGCGATGGTCGACACGAATATGGTGCCGAG  
 CTTGTTGAAGAAGGCTACGCCAGCAATTACGTCGTCTCCAACCCGAGTGGCTCCAAGAC  
 AAAGTGGGATATGCCCCTGCGCAGGAAAGTCACGGCCAAAAAATGCGGAAAGTTTCTGC  
 ATGGATCCTTACCCCGTGATCACCTCCGGCGAAGCCCGCACGTTTAACGAGCTTGCCAAA  
 AAGGAAGGCTGGGAAAGCGTATTGGTAGTGACCAGCCGCACGCACACCCAACGCGTTTCGC  
 ACCATGTTTGACCAAGTGCTATACCGGTGATTCCACAGTGCTCAACGTCAACAGCCTAGGA  
 CGTACCGGGCTTCACAAATGCAGTACTCCACGAGATTGGCGGCTTCATTAAATTTTGGATT  
 ACCGCTCCGTGCGCGGACACAAAC

>RXA00286-downstream

TAAGGACGTTCCAGCTCCAACAG



>RXA00294-upstream

TTGTTGGTGTGAGGTTGGGTTTTGTTCATCCTGAATGCTTCATTTCTACCCCTCGTGGGTAA  
AGTTGGTGCCGAATCAACAATCTCTTTTGGAGGAACTTTA

>RXA00294

ATGAGCATTTCCAACGCAATCCTGCGTGGTGTGTCTGGCGCTTATATTCTGCAGTCCGGC  
TACGGAACCTTGGATTGCCTAATGAGGCCGCTGCTGGCATTTCAGGGTCTAGCTGCAACG  
GGTATCCCAGCGGTGGCTGATATGGATTTCAGATACCTTCGGTAAGTTTGTGCTACTCG  
GAGTTGGGTATCGGTGGAGCTTTGCTTGCTCCATTTATCCCTAGCCGTCTTGCAAGTTTG  
GGTCTTGGTGTCTTCTCTACAGGTTTGTGTCCTATTTACTTCCGTAACCCAGCGATGACT  
CAAGACGACGGAATCCGCCCTTCCCAGGATGGAACCGGATTGTCTAAGGATCTTTTCCTT  
GCTGCTATTGCGGGTGCTTTGGTGTTCGCACCTGCTAAGAAGCGTAAGAAGGCGAAGAAC  
AAGTCTAAG

>RXA00294-downstream

TAAGCTTGCTTGAACGGCGCTTG

>RXA00297-upstream

AACAAGGCACCGGAAACAAGCAACGCACCTTGCAGAGGTGGTCTTAAGCATCTTGGAGC  
AAAACAACATGGCACAATAACGATCATGCAACAGGTGCTC

>RXA00297

ATGGGTTTTCACGGTGGTGTTCATCGTCATCGGAATAGGTTGGATTCTCGGTAGAAGAGAC  
ACCTTGGGCACACATGCCAGAAACCTTTGAGCCTGTTTGTCTATTACGTGGCCACCCCA  
GCGTTGTTGTTTGTATCGGGTCACCAAGTCAGATACCTCGACGATTTTCTCTCTGAACCTC  
GTGGTCATTGCACTCTCTGCGTTGATCGTAGGTTTCTGTTTTTCTACTCATGCGGTTT  
GTGATCAAAAGAACTGCCGAGTATCGGTGATCGGCATGCTAGCTGCGTCTTACGCCAAC  
GCCGGTAACCTGGGTATCCCTTTGGCAGCCTATATTTTGGATGATTTACCCGTGGTGATT  
CCCGTGATTTTGTTCAGGTGGCGTTCTACGCACCGATCACCATGACCATCATGGAGATG  
CTGACCAACAAGAAATCCACCAACTGGTGCAGCAACCTCCTGGTCACGCCACTAACCAAC  
ACCATGGTGCTCGCAGCGATTGCCGGTATTGCTGTGTCTTTGACTTCGATGAGCGTGCCC  
GTGGTGATTGCTCAGCCAGTGGAATGTTGGCGAATGCTTCAGTGCCACTGGCTTTGGTG  
GTGTTCCGACTGTCTTGTCCAAGAGCAAGATCCTGGAAAAGGGGCAGGTATCCAGGCGC  
GATGTGTTTACGGCGGCACTGTTCAGAATGTTCTGCACCCAATTGTTGCGGGACTTTTA  
GCCTTAGCCTTTGGTATGGAAGGTACTGCCTTGTGTCGGCGGTGATTCTCGGTGCACTG  
CCAACAGCGCAGAATGTCTACACCTACGCGTTGCGATTTAGAACAGCTGAATCGATGGCG  
AGAGACACAGGGGTGGTCAACCACTCATTTTCCTTCCCCGATTGGTGCGGCTCTCCATT  
ATCTTTGGATCT

>RXA00297-downstream

TAGGGTTAGCATTAGTGGTCATG

>RXA00318-upstream

TCTTAGAAGGCGTAGTCACACCATTAACCTTGCCAGAATTTTCAAGGCTTGGCTTGA  
TTGGAAACGAACATGCGGTACCAACCAGGGGAGGTAATGC

>RXA00318

GTGAGTGATGTAACCGTTGGCGATATTCTCCGCAATTTGGATGAGGCTTATCCGCCGGCG  
TTGGCGGAAAGCTGGGACAAAGTGGTGCTGATCTGCGTTGATCCAACAGAGTCGGTGAAG  
CGTGTTGGTTTAGCACTCGATTGCACCCAGGCACTGGCCGACAAGGCTGTGGACATGGGT  
TTGGACATGCTGATCATTCACCACCCATTA

>RXA00320-upstream

AACAGACCCACTCTAGCCGTTGCGGGTCTTATTGAGGTCTATAGTGGGGTGCTACACAC  
TACAAACCGTGATTGTTTCGTGATTGGAGCTGAGCCAC

>RXA00320

ATGGCTAAAGAAGATTGAAGTGGTTCTACGATCTGGCAACCGGCAAGGTTTTTCAAGGC

AAGGTTTCCGGCTTTGAAACCCGCATGGGCCCATATGACACTGAAGAGGAAGCCCATCAC  
GCCATCTCCATTGCGGCAGCCCGAACCAAGGCAGCCGAAATTTGGGACGACAAGGAAGAC

>RXA00320-downstream  
TAAAAAACTGGGGTCACACTT

>RXA00321-upstream  
CAAAGACAACACAGGTTCCCTATGAAAACGGGGAACCTGTTTCACCTACTTTTAAATCAC  
GCTTCACAATCACATAAGTCTTTAAAGGATGGATACAACA

>RXA00321  
ATGGGCCAGCATCTAGAAGTGGAACTAAGTTTTCCGTCAGTGAATCAACTCAGATTCCA  
CAACTTGAGGCTATCGCAGAAGTCGACCACATTGATCGCACCAGAAATCCACCAACTAAGC  
GCTGTTTACTTTGACACCGTAGATTTGCGCCTCACCCGCGCAAAAATTACCCTCCGTCGC  
CGCACCGGTGGAAACGATGCCGGCTGGCACATTAAGTTCCCCGGAACCATCGGTCCGCCGT  
GAAGTCCAAGCCCCACTTGATGGCGAAGGCGCAACAGAAACCTCCCTCCACGTGAGCTC  
TTGGGACACATCCGAGCGCTGATCCAAGGCCGTGAGCTGACCCCTATCGCCAGGTGGAT  
AATGAACGCCACATGTCTTACCTCGCGGATGAGGACGGCGCAGTCATCGCAGAATTCTGC  
GACGATCATGTATCCACCGTGTCCACCTTCCAGGTGGCGTGCGCAAGCAGTGGCGTGAG  
TGGGAATTGAACTCGCTGATGGCACCTCGCCGAAGAAGCCATCTCAGTACTGCTGCAA  
TCTGCACAGTCAGTCTTGACCGCAGCTGGAGCTTTTGTCTCCAACAGCCCATCCAACTT  
GTTTCGGCGCTGGACGAATCAGTCAACCACGCGCCAAAGCCTCCACAGATGGCGCAGCTG  
GACAAGAATGACCCAGCACGTGGTGTCTTTCAGCAATCGCAGCCAACGCCTCAAAGATC  
GCCGAATACGATCCTCGAGTACGCGCCGATGAATATGATTGAGTCCACCAGATGCGCGTA  
GCTACCCGAGAACTACGCAGCCACCTCCAAACCTTTGAGGGCATCTCGGCGGCGAAGAC  
TACCTCAACCTGGAAAAGGAAGTGAAGGTTCTCGCCAACATCTTGGGTGCGGCACGCGAT  
GCTGAAGTTGTGGAAGAGCGCCTCAGCAACCTGATTAACACTGAGGTTGGCGACTCCATC  
GAGGAGGAGACTAAGAAGGAAGTGC'TTGAAGATCTTGGTGCAGAATACCGTCGTGAGCAT  
GAGCGAGTAGTTTCGTGCGCTGGATAATGATCGCTACACTGATCTTCTTCAGGCACTGGAA  
AACCTCCTTGTGATCCACCGCTGATCACAGAAGTCAAGAACCCGAAGCTACCGAAGCC  
CCTGAGTCCGCTGAGACTACCGAGTCCACTGACGTCTCTGAAGCAACCGAAGAAGCAGAC  
GCAGAAGCTGAGTCTGTGCAAGAAGCTACTGAGCAGGAAGAATCAGCAGACGCGCCTGAA  
TCTGCAGATCTGGACGCTCTCGATGAGGAGTACTCCCTGGTTCCCAAGCGCCGGTGGAG  
GAGCCGAAGGAACCGAAGAAGGTTGATGCTGCTCTCGTACTTCTAGAGCACCTTGATAAG  
GCGCACGTGAAGCTCGTCAAGCTGGAAAAGAAGGCTCGCTCACAGTGGGATGATCTCAGC  
ATTCCGATGCTGGAGCGGGAAGAAAACCTTCCACAACCTGCGCAAGGCTGCCAAGAAGCTT  
CGCTACAGTGCAGAGGCAAGTGGGCAAAGCAACCACCGTTGAGACGAAGAACTGTACAAG  
GCGTGCAGTGGTGTGAGTCAAGTTCTTGGCGATTACCAAGATGCCATTACTTCCCGTAAT  
GAGCTGTTGCGCCGAGCTCAGGTTGCCCGCCGCAAGGCCGGGATACCTTCGCATACGGA  
ATCCTCTACCAGCACGAACAAACCTGTGAGGGAATACCTGACTGGTTATTCCGATGCG  
TTCAAGAGCGTAGAAAAAGCCTATGCAAAGCTGGCTGAAGATACCGCCAAGCGTTCAAAG  
AAGAACAAGCGTAAG

>RXA00321-downstream  
TAAACGCAGGCAATAAAAACTG

>RXA00322-upstream  
CGCGGTTTTTTGATGACACGGGGGTGGGAGGTGTCCAGCTTGGGTGGTTCACTGAGAACC  
GCACCGAAATTAGAACACTCCTACGAATAAGGAAACCGCA

>RXA00322  
ATGACTCTCTCCCACTTCTCCGACAACGTCACCGACGCACAAGACTCTTACCGTCAGATT  
TTAGAAGAAAGCATCATCAGCCACCTAGGTTTTCTGTGCGCTTCGTGGGTGGACTCCCCGC  
GATCTCCGCCATGAGTTTTCCGCCGATATTGATCCACTCCTGTTTCACGCGCTACCTGAG  
ATTGCTTACTCCTGCTCCGATGAGATGTACACACTGTGGGTGAACGGAACGCGTGCCGCC  
GAACTAGCCACTTGCCGGTGAATGACCTGAGAGAAGATTCTACCGAGCTACCGAAGCTA  
AGTACCTTGCTGACTGGGCAATGCTCGCAGAGCTCCACGCCTTAGACAATCAAGACACC  
AGCCCAATGACCCCGGCACAGGCCAAAGCGCATCATCGTATCACCGCACTTTTGAAAAAG  
GCAGAGTCCACCAACTTCGAAGAAGAAGCCGAAGCATTGATCCTTAAAGCAGAGACACTT

CGACAGCAGTACCGGATTGAATCACTGCTGATTAATTCCTATGACCAAGATGTCCAAGCT  
CGATCTTCTACGATTTCGTGCATCTCGGGTGTATCTGGAAGCTCCATGGATCCGACACCAA  
TACAAACTGCTCAATGCCATTGCTCGGGTGCATTCAGCGAAGCGCTGCTGATCACCAAA  
TCTGGCATCTGCACCCTCTTCGGCGAGCAAGATGACGTAGCCACATTATTGATCTGTTC  
AACAGTCTTAATCGACAACGTGCCCACCTCATGAAAACGTCAGCAGGTGCCCGAATTGCC  
CAATTAAATGGCGAAACAAGCTCATATCGCCGTAGTTTTATGATCTCCTACGCCAGCCAA  
ATCTCTAGACTTCTCATCTCAGCAAAAGAGGATGCATTCAACGAAGTAGCTGGTCAGGCA  
CCACTAGCTCACAGCGCCATCGTTCTGTCTAGAGAACAGAAGTGTGAGGTCAAAGGAA  
GCACGAAGGAAACCTTCCCGAATATGCGGACAATGACCTTCAAATCGACCAACCGACGA  
GGCATTATTGACGGATTTAATGCTGCCAATGAATCCACCTTGGCGGGGAATCTGCCAGC  
TTGGAAGACTCAACATTCATGTTC

>RXA00322-downstream  
TAGAGCGGGTGAAAGCCCCATTT

>RXA00325-upstream  
AGGATTTCTCTGAGGAATCTAGACGCAGATTAACCTCCGCTTGGCAGCGACCGGGATAAC  
ACCGCGGTTGCGGCCACGCAGGCTCACAAAGGACACCACT

>RXA00325  
ATGACAAGCATATTATTGCAAGCAACAGCGACCTATCGGAGGCGCTGCGCACCCACACTGCG  
CAGGCCCATGAAGAGGCCGAGCACTCAACGTTTATGAATGATCTGCTCACCGGGAAGCTC  
GATGCGCAGGCATTTATCAAGTTGCAGGAGCAATCATGGTTGTTCTACACCGCTTTGGAA  
GCTGCAGCTCGTGCATGTGCAGAGGATTCCTGCGGCTGGTCTGCTGGACCCACGCCTC  
GAGCGCAAGGAAACGTTGGAAGCTGATCTGGATAAGCTGCACGAAAACACCACCTGGCGT  
GACAACGTCACGGCCACTGCAGCGACAGCGTCTTATGTGGAACGCTTTGAAAGCATCGAA  
GCGGCCAAGGATTTCCCTCGTTTGGTTGCTCATCACTATGTCCGCTACCTGGGTGATTTG  
TCCGGTGGGCAGGTTATTGCACGCTCGGTGAACAGGGAATATGGAGTTTCGGAAGAGGCG  
TTGAGCTTCTACTGCTTTGAAGATCTTGGCAAGCTCAAACCGTACAAGGATAATTACCGT  
GCAGAGCTTGATGCTTTGGAATTAACAGCAGAGGAGCGTGCTGCGTTGCTGGATGAAGCA  
TCTGATGCGTTTCAGGTTTAATCAGCAAGTTTTTTCAGGCTCTTGCT

>RXA00325-downstream  
TAACCGAAGGTGAAGTCTTGCGC

>RXA00326-upstream  
CCTGATCTTTGCCCTAAGTGGTTTACGGGCTGGAATAATGGTACGTAGTCTCGGGTGTA  
AGCACACTTCGGTACTCGACAGGAAGTTAGGAATTCCACC

>RXA00326  
ATGGCAATCAAGCTGTCCATTGACCTATCAGATGCAACATTTCGCAGAACTTTCCGGCAGTC  
ATCGGTTACGCACATCAGTTGGGTGTTGATGCGGATGAGAAGCTCACCTTTGAAGGTACA  
GTCCTTAACATTGAATTCGACGGCGACCTTCAGTTTGATGATGTTTTTGATGCCCTTGAT  
GAGGCGGAAATTGAGCTCGACAACCTTCGCGAAGACGGCCCCATCTACGCAGATGATCTG  
ATCGATGAGGATGAGGACTACCGCGCACAGACCAAGAGCCAGATCAACGACGAGGTTATC  
AACGAGATCCGCGATGGTATTTCAAGCTTCGTTGATGGCATCGTAAATGGCCTTGCCAG  
GGTCGCCCGCGGTGGACGTTACGGTGATTTTCGGTGGGCCACGCGCCCTCGCGGTCCACGC  
AATGACGGTCCATTTCGGCCCATTTGGACCATTTCGGTCCGGGATACCGCGGTCCGCGTTTC

>RXA00326-downstream  
TAGCGGTTACGGTTCGGGTTTTAG

>RXA00334-upstream  
ATAAGCCCCGCATGGGATATGAGAAAAGGAATGCACGATGAGTATTGAATTTCCGTTAGG  
TAATCCAGCGCCTGCACAGTGTTTTCTGGCGAGGTCCAT

>RXA00334  
ATGGCCAAGCTTGATGACAACGTGCAGATTGAGACTGTGAACGTGTCTTTTGAGGCAGGC

GGTCGCACCAATTGGCACACTCACCCAGTCGGTCAAAACATAATTGTGCTGTCGGGCTTG  
GGCATTATGAGGCGGAGGGGGAGCCTGCTCGACTCCTGGAGCCTGGCGATGTTGTTTTTC  
GCAGCCGCCGGGGTTCGCCACTGGCACGGCGCCGTGTCTGGTGCACCGATGTTCCACGTG  
GTGGTTAACCTCAAAGGCATCGACGCGGAGACCGTCGATTGGGAGGAGCCGGTCGACGAG  
GAGCACTACCGCAGCGTGAGCGCGGAGCTACAAAGA

>RXA00334-downstream  
TAAAAATGCTTTTCGACGTCCAC

>RXA00336-upstream  
TTAGGATCTTAAAGGTAGGAAATTGCGCTTTGCGACGTGAAAAGCAACGCCTTTTGACT  
GCAGTATCCGCCCTCTACATGTTTGGATTGATTGTAACA

>RXA00336  
ATGGCAAAGCCGAAGAGAAGTTGGCTTGACGGACCCGAAATTCCAGCTGATTTTGACGAT  
CCTGATGCACCCGGCAGGTGGCCTGGCGAAAAGTTGGGGCTTCTCAAGAAGGGGCCGGC  
TCTCTGTCTCAGTGGCTCGTCTGATCGGCGGGGTCTGCGTGGACTGGGGTGTTTCTTGG  
GTTATTGCTATTGTGCTGTCCAATTTCACGGATGTGCTGGGCGATGTAGCGACATCCACG  
CTCATTATTTTCGTGATCCTGGGTGGCTTACCGGTTGGATCTTTGCTCGCACCCACAGGT  
CATGCCGTGTTTGGCATGGGCCTTGCGCGTGTGGATGCAGAGGAACGTGTGGGCTGGTGG  
CGTGCGCTGGTTGCCCCACTGCTGACGATCTTGATTCTGCCTGCCGTGATGGTGGATGCT  
GACGGCCGTGGGCTCCACGACAAGGCAACGGGAACGTCAGTTATCCGCGGG

>RXA00336-downstream  
TAATTTGTCTTGAGTGAAATTTA

>RXA00337  
GATGTGGAGGGAGGCGTCGAAAAGCATTCCTTAAAGCACTGCGGACATTGCAGCTCGCGCA  
CACGCCCATATGAAATCCCATGATGTTTTGGGGCGGCAGACTACGCCCTCAGCCGGAG  
GGCGGCGTTGCTGCCCGGTGGGCGGGATTGCGTGGACAATGATCCATAAGCAAATGCTT  
TCGCGTGACACAAAAGGCCTGGATATCACCGTGTGAGCACCATTCTGAGGGGGTGGGG  
CTGGGTGAAAATTCCGCCATGGATGTGGCGCTCGCATTGGCGCTGTATCGGGAAAATATT  
GAGGAAGCCCCACGAAGGCGCGCATTCGCGACATTTGTTGCGAGTCCGCATTCATGTTT  
AGTGAGACTTCAGTGTGCGTGCGCGGCACACCGAGGCGTTCGCGGGTGAACTGGACAC  
ATTTCCGTGGTTGATTACGCCGATGGTTCCGGTCACTCAGGCGCCACATCCGGTGAGTCGT  
TCCGCTGGTTTGTGCGGCATTTGTTGCTGCTGCGCAAACTGAACT

>RXA00338  
GTCGGCATCACGGCCGGGCGACCCATCGCGACACGGCTTTTAGGCGGCATGGACAAATGG  
GGCGTGCACGTTCTGCCAAGGATGCAGCGTACCTAAAGAAGATGCTTTTCGACGCAGGT  
GCCGGTGCATCGGCGACTACCGAGAGTGTGCCTTTGAGATCGAAGGAACCGGGCAGTTT  
AGGCCCCGTGGAGGGGGCGAATCCGGCAGAGGGGGACGTCGATAAGCTTTTAAATCCCTT  
GAGCTGCGCATCGAGTTTGTGACCGCGCAACCTGCGCGCCCGGCTCACGTCGGTGCTG  
CGGGAGGCTCATCCGTATGAGGAGCCTGCCTTCGATATTGTTGAAATGCACAGCGCTGAG  
AGTTTAGAAAATGCGACCGGATTGGGTGCTGTGGGTGAATTGCCGGAGCCGATGCGCCTC  
GCGGATTTGCTGCAACAAGTGGCCAACAACCTGCCTGTCACCGAATGGGGCGTGCGCGCT  
ACCGGCGATCCTGAACAAATGGTGTCCCGTGTGGCGGTTTCATCAGGGTCGGGTGACAGT  
TTCTTAAACGATGTGATTAAGCTCGGAGTGGACGTTTATGTCACCTCTGATCTGCGCCAC  
CATCCAGTTGATGAATATCTCCGAGAAGGTGGCCCTGCAGTAATCGATACTGCACACTGG  
GCCAGCGAATTTCCATGGACTTCCCAAGCCCAAGAAATTTTGCAGGACAAAGCCCCACAG  
GTTGAAGTTGATGTGATTTTCGATCCGCACAGACCCCTGGACCATGTCTGCGCGAGCAGTG  
AAC

>RXA00338-downstream  
TAAATTCTTGAGAACTAAAAAG

>RXA00339-upstream

ACAGGTTGAAGTTGATGTGATTTTCGATCCGCACAGACCCCTGGACCATGTCTGCGCGAGC  
AGTGAACATAATTCTTGAGAACTAAAAAAGGAGAACTTCA

>RXA00339

ATGAAGCTGGACCCATCTCTGCACAAAACCCCTGCTGCAGCTCGCCACCACCCCTGCGCACC  
CAAAACGCCAACTCCGCACCGAAGACCACCCCGGAGCAGGAAGCTGTAGACAAGGCTGTC  
GCTGAACCTTCCCGCAACCGCGACGCTGCATCCGCTGGACAAATGGCTGTCGATGACATG  
GAAAACGAAATCCTGCGCATTCAGTCCGACGAACGCAAACTGCGCCGCGCAAGAAAGAC  
GGCCAGGACGCACTCGGTGCAGAACTGACGAAGAGCGTCGCGCGACCTCAACCACGAC  
GTCTACACTGCGAAGTCCCGCATCGCTGACCTCATGAGCGAACTGCAAGAAGCTCACAAT  
GAAATCCATGCGCTGCGCAACAACCGCGACCTCGCACAGTCTCGCGTCAAAGACACCGAA  
CGCAAAGTTGCGGACGCGCGCAGCCGAGAAAGCCGCGCAGCAGCAACCCAGAAAGGT  
GAAGACCCAGCAGTAGTCATCGCACACCTGGAAGAGAACTTCCCTCCGAAGCACTGGCA  
GAATTCATGCACAACGCCTCGAAAACGGCGTAGGCGCAGCACTCTTCAACGGCCGCTCC  
TGCAGCGGATGCGCCATGGTTCTCCCTGCAACCGGTATCTCCGACATCCGCAACACCCCC  
AAAGATGAGGTTCCACAGTGCCCAGAATGTGGCTCTTACCTCATCACTGACATCTCT

>RXA00339-downstream

TAGAAAGACCACCCAGTGAAATT

>RXA00342-upstream

TAGCCCCGCGGTTTCATGTTGAATCCATGTAATCGAAAACACATCGGGGCCACACGAGG  
AGAATTATTAAA

>RXA00342

GTGGCCGACGCTCCGGGCGCAGTCAAGCAAGGTGCCCAGGATTATGCTCAACTACTCGGC  
ATTCAATCGGGTCATATCGTTCAAGAAATTGGATGGGATGAAGATTCGACACGCTGATC  
AGCGAGTCCATCGAAGATGCAATCGGTGAGGAACACTCGATGAAGAAACCGACGAGCTG  
TGCGATGTGCTGCTCTGGTGGCGCGAGGATGACGGCGATCTCGTCGACGGACTTGTG  
GATTCATCCGCTCCCTCGCTGAGAATGGTCGTATCTGGGTGTTGACTCCTGGCATTTGGT  
AAAGAAGGAGCCCTGGCTCCTGGAGTTATCTCTGAATCAGCTCAACTGGCAGGTCTCGTG  
CAGACCAAGGCAGAACGTCTCGGTAAATTGGCAAGGTTCTTGCCCTCGTCCAGCGTGGAAC  
AAGAAGCCT

>RXA00342-downstream

TAACAATCGCTAATTTCCACGGC

>RXA00344

ATGAGTTTTCGGACTCGGTCTGTCCGTGCTGTTTCATTACCTCTACCCCGGCCGAAGCTCC  
ACCGCGTTTCTCCCTGCTCACAGGGCAAATCGTTGGTGTTTCTCATCATCGCTGTGGATC  
CTTGTGGCAGTCAACGTGATCGTGGTTAGCGCCGTGGTGATTTTCTGGCGCCCGCTGCTT  
TTCGCCAGCGCCGATCCGATCATGGCGCAGGCCTCCGGAGTAAACGTCCGATTCATCGCC  
GTTGCCTTCGCAGTTCTGGTTGGCCTCACCACGTCCAGTCCGTGCAGATTGTCGGTGCG  
CTGCTGGTCATGGCATTGCTGATCACTCCCGGCGCGGCCGCTGTGGCGGTGACCGCCAAT  
CCAGTGAAAGCCGTGGTGTGTCAGTCATCTTCGCGGAAGTATCGGCTGTGGTGGCCTG  
CTATTGTGCTAGCGCCTGGTTTGCCGGTGAGTGTTTTTGTACCAACCATCTCTTTTGTG  
ATTTACCTGGTCTGCCGCTGATCGGTTGGCTCCCGCGCGTGGAGCTCAGCGTGACGAA  
GATGCTTATCGACGCCCGCAGCATCACCACCCCTCAC

>RXA00344-downstream

TAGGCGTTTTCGAAGT

>RXA00349

GAGAAAATCCTGGACGAGTTGGAGCAATCCCTGCGTCTTATGGTTTCCCTGTTGCGTTG  
CTTGGCTGGCCAATGATGGGTGGTGCTGTGCTGTGCTGTGGGTGGTGGATGCCAGGTT  
TCCCTAATTGCTTTTATTACCGCGTTTCAGATCATTTGCCACGACGTCATTTTTTGGGAAAG  
AAGGGTTTGGCTACTTTCTTCCAAAATGTTGTTGGTGGTTTATTGCCACGCTGCCTGCA  
TCGATTGCTTATTCTTTGGCGTTGCAATTTGGTCTTGAGATCAAACCGAGCCAGATCATC

GCATCTGGAATTGTTGTGCTGTTGGCAGGTTTGACACTCGTGCAATCTCTGCAGGACGGC  
ATCAGGGGCGCTCCGGTGACAGCAAGTGCACGATTTTTCGAAACACTCCTGTTTACCGGC  
GGCATTGTTGCTGGCGTGGGTTTGGGCATTCAGCTTTCTGAAATCTTGCATGTCATGTTG  
CCTGCCATGGAGTCCGCTGCAGCACCTAATTATTCGTCTACATTCGCCCCGATTATCGCT  
GGTGGCGTCACCGCAGCGGCCCTTCGCAGTGGGTGTTTACGCGGAGTGGTCCCTCGGTGATT  
ATTGCGGGGCTTACTGCGCTGATGGGTTCGCGTTTTATTACCTCTTCGTGTTTATTTA  
GGCCCCGTCTCTGCGCTGCGATTGCTGCAACAGCAGTTGGTTTCACTGGTGGTTTGCTT  
GCCCCGTCGATTCTTGATTCCACCGTTGATTGTGGCGATTGCCGGCATCACACCAATGCTT  
CCAGGTCTAGCAATTTACCGCGGAATGTACGCCACCCTGAATGATCAAACACTCATGGGT  
TTCACCAACATTGCGGTTGCTTTAGCCACTGCTTCATCACTTGCCGCTGGCGTGGTTTTG  
GGTGAGTGGATTGCCCGCAGGCTACGTCGTCCACCACGCTTCAACCCATACCGTGCATTT  
ACCAAGGCGAATGAGTTCTCCTTCCAGGAGGAAGCTGAGCAGAATCAGCGCCGGCAGAGA  
AAACGTCCAAAGACTAATCAGAGATTTCGGTAATAAAAGG

>RXA00349-downstream  
TAAAAATCAACCTGCTTAGGCGT

>RXA00353-upstream  
CTTTCATCAGGACCGAAAGCGAACGTTTCGTATTGTTGAGCCTTTTGGTTCACCACGGA  
TGCGCTGATCTATTTTCATGGCTCCACGAGTCAGGATCT

>RXA00353  
GTGGGGCGCAGCTTCACCAACAGGACTTTTGATCCGTTGCCGTTTCATGGTGGTTTATCCG  
GATGGGGTGGATCAGCATTGGAATGATGCGCGGTTGGGTTTGGATGAAAAATACCGGCCAT  
TTAGGCATTGATGATGTGGGGTCTTTGTAAAACCTCGCCACGCACTTGGGCAACACGTAT  
GGCATCAAGAGGATCTTTATTGTGGCTATTCCAACGGTGGGCAGATGGTGTGCGGCTC  
ATGCATGAGGTTCCCAAGATGCTCAGTGCGCTGCAACCATTGCATCCAACATGCCAGTT  
GCAGAGAATACGCTGCCGCAGGTGAAAACCTTCAAGACACATCCGGTGCCCTATTTGGCG  
ATGGCTGGAAGTGGCGATACTTTTTCACCGTATGAGGGTGGCGATGCCGGTATTGGTCGC  
GAACACCGCCGTTGGCGTGGGCATGTCCGCCCTTTGATTACGCTGCCTATATTGCCGCCGA  
AACGGACTGACCGAACACCGCCACGACGTGATTGATGATGTGGTGTGATCGATACCTGG  
GATGGAGAAAATCCCGTTGAGTTTGGACACTCAACGGGATCGGCCACTTGGTACCAAGT  
GGGAAAACCTTATCCAGAATTTCTAGGCCCTTCAACCACATCAGTGATAGCGGCTGAGGAG  
ATTGGGAAGTTCTTTGATGGGGTCAGGCGTCGA

>RXA00353-downstream  
TAAGCTCAAGCTTTAAAAACGCA

>RXA00355  
ATCGCTTTCGGTGCAGCTCACCAGCATGAAGCAGCAGGGCCAAAGCGGAGCTTTCACC  
GTCCTCGAAGTTGCTCCATACCTGCTCTCCCCAGAGAACTTGGACGATCTGATCGCACGC  
GACGTC

>RXA00355-downstream  
TAATTTAGCTCGAGGGGCAAGGA

>RXA00362  
GATGAAAAGACGGGATGGACTGCTGAAAGGTCCGCAACGTTAGTCGCGGGCAACTCTGGC  
CTTGGTGTGCGTTGCCCTCCCAATTCAACAATGTTTCATCATTTTGGCATTGCCAGCTGCA  
GCAGCTTCTTCGGCTCTCAGGTGTACATTGCTTTGGCTTGTTGGTGGTGCATGTCAGTG  
CTCTACCGCTTAGCGGTCGTCTTTTACTGGACACGTAAAGATAAAATTCCTGCCACCCCT  
GATGATCAACGGGTGTCATTCGGTGAGGCAATGAAGACTGGATGGCGTTACCGTTGATC  
TTCCTTGGAATTTTGATCCCCGTAATCCTCACAATCGGCCCATTTGTCTGAATGGTTAAAG  
ACACATGGAGTTGGGGAGTCTGGTGTAAATCGATGTTCGATCATCGTGTGGGTGCCAATT  
CTGATTACGGCAATTGCTCTGATTGAAGGGCGTAAACGAATTGCTAACAACATGGCACAC  
TTTAGGGTTTCAGATCTCCAAGGACTTGCCACAATTGCCACCGTAGGAATTTTCGTTGTTT  
TCTGCGCTTGCAGCAGCGAACATCATGGAAGAACTGGGTGTTGGCCCGCAGTTGTCTAAC  
TGGCTTGATTCCATGGACCTACCTAAGTCTGTTCATGGTGCATCATTTGTCTGCATCATGTGC  
ATTGTGGTGGCAACGCCACTGTCGTCAACAGCAACCGCGGCTGCGATTGGTGCTCCCGCT

GTGCTGCGTTGGCTGCGGTAGGTATTGATCCAACTGTGGCGATCGTAGTGATCTTGCTG  
TGCACCTCCACTGAAGGTGCATCCCCGCCGGTGGGCGCGCCGATTTACCTTCTGCTGCG  
ATCGCCGATGCAAACCAACGAAAATGTTTCGTACCACTGATTACGTACTTTGTTGTCCCC  
ATGATTCTGCTTGCTTGGCTAGTTGGAATGGGATTCTTACCAGTGATTGTTCCCTACGGGT

>RXA00362-downstream  
TAAAGGGGTAAAAATGAACTCAA

>RXA00373-upstream  
CACGTGGCGGATCTGCGCGCTAAGGGCGAGCTGCCGCCGCCGAGGAAGAAACGCAGGCGT  
CGAAAAGCGTCTTAAAGGTTTTTCACTAGGGTGTGTGTC

>RXA00373  
ATGGACATCCAGCAGCTAGACGCGGAAACAACAGCATGGAAAGACAGCCTCCTGCGCGCC  
GCACAGGAGGCTGGTTTTTCATTTTGAGCCACCGAAACTCTTCGAGGATTTTGAGACCATG  
GTGGAGCAGTACAAGCAGGCAGCTGCGAGCGACCCGGACATTGATGTCAGTATTCAG  
CAAATGTGGGGCATCGTGGTGGGGGAGTACCTGCGCGAAAAAATGGGCATGGAATGGGTC  
GTCATCACCGATGACTACGGCACTGACCTCGCGATTCTAGCCACGGCACCCAACGGGGAC  
CACGTATATTCTGCCCCATCATCGTGGTGGGCAAGCGC

>RXA00375-upstream  
CAGCCTGTCAAATGCTCACCGACTACGCACCAGAAGACGCTAAACGGTAAGTACTGAAG  
AATTTTTAAAGACGACGGAGATTTCAACACAATGCCAAGC

>RXA00375  
ATGTTCCCATCACCCGCAACTGGCGGAGATGACATCAACCGACGCCCCCTGAATGAACCA  
AACGCAGATGCAACCACCATCCCCACTGCCTAAAAGTGGTGTCTGGATGCTGTTTGCC  
ACTGCAGCGTTTCATGATTTTTTACAGGCCCTGGTGTATGTACACCGCCGGATACACGGGACCT  
GATGATGTGGATGAGAGCTACAAAGCCGTGTGTGGTGAACAACAGGAGTTCATCGGTGGC  
ATCAATGCCTTTGCTGGCGTCTGTGATTGCTGCACTTACTTCACAACTGCCAAAGGGCGGC  
AAGAATCCGCGCCGTCTTTGCTTGGCCATCATGTTGTTGGTATTGCTGACAGATCTGTTG  
TCTTTTGCCACCCGCGCTGGAGGCTTCGCACTCGCAATCATCGCAGTCTTGTGGCTTTG  
GAAGCACTCTTGATGTTCCGCCCAGCAGTCAATGATCACATTGACCGAAATCATATGGCT  
CGTGAATGAATCGCGAGAAG

>RXA00375-downstream  
TAGAACGGTTCGACCGTACTTTT

>RXA00380-upstream  
CAGGCAATGCGACCTCGCCTCAGTGACATCCTTGGTGTTCGAAGACGATCAAATTGTGCG  
CGTGCATTACAACGAACCAGCTCAGGAGATTTGATCACTC

>RXA00380  
GTGCGTTTGACCAAACTAGCAGCAACAATCGGCTGCGTGACACTCAGCGGACTTGCGCTA  
GTAGCCTGCAGCAGTGACAGTACCGCTGGTACTGACGCTGTTGCTGTCGGCGGAACCTTC  
CAATTCCACTCCCCGGATGGAAAGATGGAAATTTTCTACGACGAGGCTGACCGTCAACAA  
CTCCCCGACATTGGTGGAGATTCCCTCATGGAAGAGGGCACACAGATCAACCTGTCTGAT  
TTCGAAAACCAAGTTGTCATCTCAATGCGTGGGGGCAGTGGTGTGCACCGTGCCGCTCC  
GAATCCGATGATCTCCAGATTATCCATGAGGAACTCCAAGCTGCCGGAACGGCGACACC  
CCTGGTGGCACCGTGTGGGTATCAATGTGCGTGATTACTCCCGCGACATCGCCCAAGAC  
TTTGTACCCGACAACGGCCTTGATTACCCAAGCATTTACGATCCACCATTTATGACAGCA  
GCATCCCTCGGTGGTGTTCGCGCATCGGTGATCCCAACCACCATCGTGCTGGATAAACAG  
CACCGCCCCGAGCAGTGTCTTGCGCGAAGTCACTCCAAAGATGTGTTGGATGTTGCG  
TTGCCATTGGTAGATGAGGCC

>RXA00380-downstream  
TAAATGTCTGAGATTGTGGTAGC

>RXA00387  
 CAAAACGACCCAGAAACCTGGGAAGACTACGAACCTTCGCGTCAACCACCCACTGCGCATC  
 GAAGGCGACCGCTTACCTTCAGGGCCACGGCTTCGCCCAACATTCACCGTGACCTGG  
 CCAAATGGCGAGACCCGCACCCAGACCGTGCAGTGGCGCCAGACGACCCGACCTTCTTC  
 CTGTCTTCAGGCGTGGTCCGTTTCGATCCACCCGCGGCATGTACCCAGACCTTTACGAG  
 CGCCGCCAAAACAGTTGGCCATCCAGGGACTTTTCGCACCGACCGCGGAATGGGAAGGC  
 GACAACAACGAACCTGCTGACCTCCTCTACCCGGCGATGCGTGACCCAGCCGTGGCGATC  
 GATATTTACCGCGCGACAATGGCCTCGATACCGGCATCGGACAGTCATTGTTACGCCGTG  
 GACTCTAGTCTCATGCACAGCGGCGTGCTGCAAAAATTTAGCGCGTCAACCTCCAAATC  
 GGCGACACCGTCAACCTGGATGATGGCACCACCGTCTCCTTCGACGGCGCGTCAGAATTT  
 GCCAACTACCAGATCAGCCGCGACCCACACAAAATTTGGGTGCTGGTCACCCACCGTGATT  
 TCGCTGGTCTCCCTGGTTGGATCCCTGATGATCCGACGCCGCCGATTTGGGTGCGTTTC  
 TATCCACAAGAAAACGGAACACCCGCGTGGAACCGGCGGACTTGGCCGACCCGACCGC  
 GCAGGCTGGGGTGGCGAATACGAGAAATTCACCGGAACTGCTGGGTCTGAAGGAGGAA  
 GATGAAGACGAAGAGTACTTCGACCACGACGAC

>RXA00387-downstream  
 TAACACCGCAATTTAAAGGCTTT

>RXA00390-upstream  
 GGAAATAGACCGTTAATAGCTGGTCTTTACATTTGCCAGAAAGCTCCGACGAAACCCCAA  
 TAGTTGACACGGAAACTAATTCATTCTAGCTTTAGTGACC

>RXA00390  
 ATGTCAACTACCAGGGAAATTGCATTCCTCATCGCACGTATCCTCTTGGGCGTCATCCTC  
 ATCGCCACGGCTGGGACAAGTTCGCCATCACAGGACTTGAAGGCGTCACCGGCTTCTTC  
 GATTCACCTCGGCATCCCAGCAGCCGGCATCGCCGCAATAGCTGCTGCAGTCGTCGAGCTC  
 CTAGGAGGAATCCTTATCATCCTAGGAGTATTTACCCGCATCGTTGCCGCCCTTCGTTGCC  
 ATAGACATGCTCTTCGCAGCACTGTTTGCGCACGTCTCCTCCGGCATCTTTGTACCAAC  
 AATGGTTGGGAACCTACCGGCGCAATCGGCGCTGGCGCGCTGCTTCTCATCGCAGTTGGC  
 GCAAGTGCATGGAGCATCGACGGGGTCTGGCAAAACGCAAGGCC

>RXA00390-downstream  
 TAAATCTAGCGCCACAACCTCCGA

>RXA00392-upstream  
 TGCTTGAAATACGTTTCGGCAGGCTATGGGGGAGTGTGAAACGCTATTGTGAAATGAATAG  
 ATAGGTTCCATAGTCGATCGAGGAGGAGTCGCAGAAGTTT

>RXA00392  
 ATGTGGGTTGGTTATGCGGTTTCGACAGATCGCCAGTGTTTTCTTACTCTTTTGCGCATG  
 CTGCCACTAGCAGCGCGAAATCGAGTTGCCAGGGGACGCATCCCGGAAACCGGCGATGTG  
 GTGATCTCATTGACCACCCATGGGAAGCGAATTAACCTACGTTCACTTCACCATCGAATCG  
 ATCGCACGCGGCCATGTGAAAGCACCAATTGTGCTGTGGTTGGACAAACAGACTTTGAT  
 GCGCGTGGCCTGCCACCATTAAGCGACTTGTGCGCCGCGGTCTGCAAGTACGGTGCAGC  
 GACGGCTTCTACGGCCCCCACACCAAATACTGGAACCAATTCGAGAAATCCACGGCACC  
 GCGGTGCGTGTGCCACCGTCGACGATGACATGATCTACCCCGAGTGGTTCTTGCAGCGC  
 TTGCTTTTTATTGGCGACCTGCGCATGGATGCGGTTGTGCGCTACCGGGCGCACAGAATT  
 GAGCTTCGCGACGACCGAATGCTCCCGTACGTTAAATGGAGTGCCGACAGACACCTCAAAA  
 GCGTCATTCTGCACTTTGCCACGGGAGTGTGAGGCGTTTGTACCCCGTGACCTTCATT  
 GATTATGTGGTCTCCAGGGCGATGTATTCCTTGAGAACTGCAAGCGCGCCGATGACGTA  
 TGGCTGCATGCCTGCGCACTGCGCTCTGATCACCTATTTCGCCAGGTCTACGCTCAGCCC  
 CGACACTTCGCTGTGCTGCCCCACCACCAAGTGGGAGCACTAGTTGTTGGCAACACCTC  
 ATGGGTGGAATGATGAGCAGATCGCCAAAGTGTACACCGATGAAGATGTGGCAAACTA  
 GTTGCAGCCAGCAAGAATGAAGAC

>RXA00392-downstream  
 TAAACAGCTTCGCGATAGCAG



>RXA00394-upstream

ACCCACTTGAACCTCTCCTTAAATATTTGCTTCAACCTCCCACAATACGGAACCTTTGAGG  
CATTCCTTGGGTATCGGTATGTATTGAGTAGGGTTGAATAT

>RXA00394

GTGAGTGAGTCCAATACCCCCAATCTCCAGACACACCAAGCGCCGGAATTAAACCCGGAA  
CTACAAAAGCTGCCCCGAAAAACGTGCTGATTTACGGTCTGGCACGTTTGCTTCTGTTC  
GTCGTGCTGACCTTGATTATTCATAGCCTGGCTCTGCTGATTAGTGCGCCTGTGCCACTC  
GTTATGTCTGCGATGCTGGCTCTGATTGTGGCGTTCCCATTTGCCATGCTGGTGTTTCAGC  
AAACTGCGCATGAATGCCACCCAGGCTGTTTCCCAGTGGGATGCACAGCGCAAGGCCAC  
AAGGAATGGGTTTCGAAGCGAGCTGGCGGACCGC

>RXA00394-downstream

TAAAAAATTCCTTCGTTCTTTG

>RXA00395-upstream

ACTCACATATTCAACCCTACTCAATACATACCGATACCCAAGAATGCCTCAAAGTTCCGT  
ATTGTGGGAGGTTGAAGCAAATATTTAAGGAGAGGTTCAA

>RXA00395

GTGGGTAGGCTTTTGCTGATTATTTTGGTTATCGTCGCAATCGTCTTGCTGTGGAAGGCC  
TTCAAGCCATCTACATGGAAGCGTAACGCGGAGATCAATCAGGGCCAGGCACCTCGTGCA  
GTGAAAGGCCCCGACGATGATGAAGAATTCTTGTGGAATATTGAAAAGAATCGCTTCAAA  
CAGCGTCGCGCCGACGAGGCTGCCCAATTAGAAGAGGAAGAACGTCTCAAACGGGCCAGG  
GAACGCTACGCAAAGCCTGAAAGCTCAGAAGAAGGTCCAGAGAAGCCCACTGAGGATTCT

>RXA00395-downstream

TAAAAGGGCTTCTTTAAAAAGAT

>RXA00396-upstream

ATCCCTTGGCGCTACAACGGTGTAGCCATTGGTACCGAGGATCTGTGGTACATCGGCGCA  
GACAAGACCTACATTTTGAGCCAGCGCTAAGGAGAACCCA

>RXA00396

GTGACAGAAATTGCAGAAAACCTTCAGCGCTTGGGTATTGAATTACCTGATCTACCAGCA  
CCGCAGTATTCTACGTACCGTTCAACCGCCAAGGAAACACCTCTATGTATCGGGGCAG  
ATTTACGAACCGCAGCGGGAGACATCCTCGCCGACGAGTTGGCGAAGACGCAACATTA  
GAAGAAGGAATCCACGCCGACAGGTTAGCCACCATCAATCTGCTGGCCAGAATCCACCAA  
TCCATCGGTTTGTAGACAATGTGGCCCAATTCTGAACTGAATGTGTGGGTCAATAGCTCC  
GATGACTTTTATTACGACGCTCAAGTGGCCGACGGTGCATCCCAGCTCCTTGAGGCAGTG  
TTGGGTGAGGCCGAAAAACATGCACGCACAGCACTACCCACAAATACTCTCCCCCAGGGA  
GCACTAGTGGAATTGGATGCTGTCGTTGCGGTACCGAGGCCGCCGAAGTT

>RXA00396-downstream

TAGGACGCGTGGGCGAAAAATTC

>RXA00397

AACCTGCACTCCTCCAACAGAATGCTCTTCCCTGGACCTCCTGTGGATTTCCCGATCAAC  
GCAGAAACCCGATGCATTACGCTCGACGCCGGTGTTCAGTAAAGAAGGACGGCGTGGTG  
CTGGGTACCTCAGATATGGCGAGGTCCCTGCCTCGAACCGCCGCTGGCCAAGAAGCCTAT  
GAGTACTTCTTCAAGGTGGTTCGTGAAGGCATCATCGGGCAGCTGCGCCCGGGCGTGATC  
TGCGCTGACGTGCACGAAGCAACCTTTGATTACCTAAGCCCGCAGCTACCTCGCATGATT  
GACATCGGAATGCTGGGTGCCGACACCGATTTCAACACCATCTACCGCAAGCGCAATGTT  
GGCCACCTCATGGGCAAGCAGGAATCCTTTGCCAATGAGCTTCGCCCTGGATACAAGCAC  
ATTCTTCACCACGGCTCCTATGGTGGCGCGGAGATCCCTTGGCGCTACAACGGTGTAGCC  
ATTGGTACCGAGGATCTGTGGTACATCGGCGCAGACAAGACCTACATTTTGAGCCAGCGC

>RXA00397-downstream  
TAAGGAGAACCCAGTGACAGAAA

>RXA00398  
TACCTCCCCGAGCCTTTACCCGTGGAGGATTACACTGCGCGTGTTGAAGGCCCTCGAAGTT  
GCTGGCGGAGCGATTGTTTCCGGTTCTTTCCAGGCTTTTCGACCAGGGCTACCTCAAAGAT  
GCTCTCGCAGTGCTTGGCCCAGGCTATGTGCGGTGTCACTCAGATCCCCGCAGATACCTCT  
GATCAGGAGATTCTTGATCTGGACAAAGCTGGCGTGAAGGCTGTGCGTTTAAACTTGAAG  
CGCGGTGGTTCCGCAGGTCTTGACGATCTCGAGACCTTGGCACGCCGAGTCCACGACCTA  
GCCGGTTGGCACACCGAAGCTCTATGTGGATGCTCGCGAAGTACGAGTTGGAATCAACC  
TTGGCCTCCCCTCCCTGCTGTGATGATCACTTAGGGCTCCACCGCGATGGACTTCCC  
GCACCTCTTCGCTTGGTAGAAAATGGCATTAAAGTCAAAGCAACCGGATTTCGGACGGGTA  
GAAGTAGATCCAAGTGAAGTCAAGCAATCATGGCTGTGATCCCACTGCTTTGATG  
ATCGGAACGATCTTCCATCCACCCGCACTAAGCGACCTTTTGAAGACGCTGACCTAGAT  
TTGATCGCTGAAACGGTTGGCGAAGATCATGTGACAACGTCTTCTGGAACAACGCTGCA  
CGCTTCTACCTCGGAGACCAG

>RXA00398-downstream  
TAGTTTTAAGACCCGAAATGTCT

>RXA00399-upstream  
GGACATTGCTATGTGCTGAGTTGTAGTAACCCCAAAGCCACGGATTAATCAATAGTGAA  
ATTCAATGATTTTCTTTTCCCACAGGCCTAAACTTAAATC

>RXA00399  
ATGAGCCACAACGACAGCCCAAACCTTTGCTCGCCGAGCGCTCAATTGGCTCCGCCAAGGT  
TATCCAACCGGTGTTCCGCGGCACGATACTTTCGCTCTGTTTTACGTTTTGGAGCGCGAA  
CTTACTGAGGAAGATCTCAATGAGCTCGCAGAGCTTCTCATCGCGGAAGGTGAGAACAAAT  
GGGCTGCACGATAATCCCATACGCGTGAAAAAATCGGCAAGCTGATCACGCATGTTTAC  
AGTCAGCCACCTGAGGATGAAGACATCGATCGAATTCAGAAAAAGCTGCAGGCTGAGGGC  
TTCCCCACCCGCAAT

>RXA00399-downstream  
TAATTAATTGGAGTTTTGTTGTT

>RXA00408-upstream  
GGGGGAGTTTCTCAGCCGTGGCTCACGAGATTTTCGATAAATTGGCAAAGTGACATTAT  
GACAAATACGCACAGGCGAACCCAGAACCCACATGAGGGC

>RXA00408  
ATGAATCCAGTGTCACCAAACTGACCACGGCCAGGTACCTCACCCGCATTCCATGGCTG  
CTGATCAGCGCGATTGTGTTTGGGGTGCTTGGAGTTTTTGTGTCTTCGTGGTTTTACGCC  
GGTGTGATCGTAGTTGCCGTCACTTATCTGGCAGCTGTGGCTGATCCCGCAGCAGGTC  
AAGCGACTGGGATGGCTGGAAACCTCCGATGAGCTGCTGATCACCAAGGGAAACTGTGG  
CACACCTTACGGTTGTTCCTATGGCCGCATCCAGTTTGTGATGTCACCGCAGGTCCC  
CTCGAGCGCGGTTTGGCATGAAACAAGTGCAATTGCATACCGCGTCGGCGTCCCTGAC  
TCCACCATTTCAAGGCCTGCCTGTGCGGAAGCCGATGCCTTACGTGAGCGACTGGCTATT  
AAGGCCCGGGAGAGGATGAGCGGACTA

>RXA00408-downstream  
TGAGCAGCCTTGAAGGGTTTCGA

>RXA00409-upstream  
CGGCGTCTCTGACTCCACCATTTCAAGGCCTGCCTGTGCGGAAGCCGATGCCTTACGTG  
AGCGACTGGCTATTAAGGCCCGGAGAGGATGAGCGGACT

>RXA00409

ATGAGCAGCCTTGAAGGGTTTCGAAAAGTCCACCGCGCCACCCCATTCCTTCGCATCTGG  
 ACCATCATCGTCGCAGTTCTCGCGGCATTCGCATTCAATTCGGCGCATCCGTTTAAAGT  
 TTCATCTGGGGTGTCTGTCACCGGCGAATACGGATTTCGCAGTGCTGCCGATTCTATTGACC  
 GTCGGTGGCGCCGTCATTGTGGTGGCACTGGCCTGGATTATCACCGGAATTTGGTGGAAA  
 GCCGTCCGATTCCGCATCACCAATGAAGAGGTGCAGCTGCAACGCGGAGTGATCAGCAAA  
 GACCTCCGCACCGCCGATTTGACCGTATCCAAGCCGTTGACCTGGTGGAAATCATTCATC  
 GCCCGTATCTTCCGACTGGCAGAAAGTCCGCATCGAAACCGCCGGCGGCAGCGACTCCGCC  
 ATCAGCATTTGGCTTTTAAAGAAAAGCGAGGCCGAGGCCCTAAAAAGGGAGCTTCTCGAC  
 GCCTCCCAGCACTCAGTCGCCACCACCCAGCCGGAGTTCCGGCTGAGCCTGGGGTAGGG  
 GAGACCGTTGTAGTTGAGAGCGCGGGCGATGTTCTGGTTCCACAAATCCCCGTGCAACGC  
 ACCCTCGCCAGCACCGCCTTATCACTAGCAACCATCATCACCGCGATCGGTATTGTGATT  
 TTGCTCTTCGTTTCCTTTTCGGAGTGAGCATTGCCGTGCCGTTCTTTGTAGGCATGGTGCCA  
 GCGGTCTGGAACCTGATCGATAAGTCGTGGCAATTCACCGCAACACAGCGCAACGATGTC  
 CTGCATGTCAGCTATGGACTTGCCAACCGCCGCAACAATCAATCCCACTGGGACGCATC  
 CACGAGTGAAACTAAAACAGCCATTGCTGTGGCGACTGGTTGGCTGGTGGACCGTGACC  
 GTGCCGTGTAGTTGGCTACGGCGACACCACCAAGGCGGAACCTCCAAAATCTTGCCCGTG  
 GGTTCCAAAGAACTCGCACTAAAAGTCCTTGAAGCGGTGGGGCCACTAAACAGCGCCGAC  
 ATCGCCGAATCTGCAGACCCATCACATATGAGCAGACCCAGTACACACCACCAGTTGCT  
 GCACGCCTGCTCACACCAGTCGATCGGACCCGCCAAGGCGTCACGTTGATTGGTGTGGCT  
 GGTGCCCTGGTGCAGTGGTTCGTGCATGAAGGCAGATTTCATGCCACGTATGTCTGTGATT  
 GATACCTCCACATCCAAGAACTCACCTTAAACACGGGCGGATCCAAAGAATACTGGGA  
 CTCTCCACCGTTGTGTTAACCTGGTCCAAGGGCCAGTGGGAATGGCCGCATCGGATCTC  
 AGTGCAGCTGATGGAAAAGAACTTCTCAACATTCTCCGCAACAGAAAACACTACCCGCACTG  
 GAATCAGCTCCGCTGGGACAAAACAGCCTGGAC

>RXA00409-downstream  
 TAAGGTGTAATCATGCACATCTC

>RXA00411-upstream  
 CATTTGGCAAAATGACTGTTTCGACTCACCGGCAACACCGCTGCGATTGAAGAGTTCTATC  
 AAACCTTGACCAAGACCACGACCATCAAGGAGATCACCCG

>RXA00411  
 ATGAACGAGATGATCCTCGCAGCTGACTGGAACCGGCTAGGACCCACCTTCCAAACAGCC  
 ATCATTGACACCCTGTTGATGGTCATCATCACCATGGTGGTGGCTGGCTTACTGGGTCTT  
 GTCGTCCGGCCTGCTGCTTTACACCACCCGCGCTGGTGGAAATCTTGAAGAACAAGGTCATC  
 TACACCATTTTGAATGTGCTGGTGAACTTTGTTCGACCCATCCCATTTCATTATTTTGATC  
 GCCGCCATCAAGCCACTAACGGTCGCCGTCATGGGCACCTCCATCGGCCGAGATGCCGGC  
 ATCTTCGTTCATGGTTGTTCGCAGCGATTTTCTCTGTGGCTCGAATCGTGGAGCAAAACTTG  
 GTCTCCATTGATCCTGGTGTTCATCGAGGCAGCTCGCTCCATGGGTGCGTCCCCGATGCGC  
 ATCATCGCCACCGTGATCATTCCAGAAGCACTTGGACCATTGGTTCTGGGTACACCTTC  
 CTGTTTCATCGCGATCGTCGATATGTCCGCAATGGTTCGGCTACATCGGTGGCGGTGGTCTT  
 GGTGACTTCGCCATTGTTTACGGCTACCGCGCCTTCGACAACGAAGTTATGTACGTTGCC  
 GTCCTGGTTATCGTCATCATCGTGCAGGCAGCCAGCTTCTGGGCAATTGGCTGTCCAAG  
 AAGATCATGCGCCGC

>RXA00411-downstream  
 TAAACCTCTTGCATAGAAAAACC

>RXA00416  
 ACTTCCCACTACGCCAACCCGCTTGGTGAGTTCGGAAACAGGAACGCATTTCATCGAAGAT  
 CTCGCGATCCGAAGCTGGAATGAGTTGGCTGATCCTCAACAATTCAGCGACGCCTTGAAC  
 ACCTCTCCATGGACGATCCCTGAGGTGTTTCATCTTCCGTGGCTCCATCGATGATCCTGAC  
 GCCGGTTGGAAATACGATGTGGCTGAAGATCTGTACCCGAACAATCCAAACGTGCGCTTC  
 CGCGGCGTGTACTTTAACCCGGAGTCATTGATCAGATGTGGCAGACCAAGCAAGTGGGA  
 CCTTTCGTGGTGGTAACGCACAATGAG

>RXA00416-downstream  
 TAATTCCTACCAAACGACCCAA

>RXA00418  
 CTGGCGTCTTACTTAAGCCCAACTGCGCTGGTGGTTGCGGTGTTGGCTATTCCGCTGTCT  
 GCGACCCGCCTGTATTTGGACGGAATCAGCGTTGACCAGGGCTTTAGAACTCAGTTTTTA  
 ACCCGCATGGCTGACGATATCGGCTTGTTCGGACATGAACACATCGATATGCCTACCTTC  
 TACCCTGCTGGATGGTTCTGGCTCGGTGGTCGCTTGGCCAATCTTTTGGGGCTGCCCGGT  
 TGGGAAGCTTTCCAGCCATGGGCAATTGTGTCCATGGCAGTTGCTGCTTCTGTGTTAGTT  
 CCAGTGTGGCAGCGCATCACCGGTTCCCTGCCGGTGGCAACAGGCATTGCGTTGGTGACA  
 ACCTGCATTATCTTGGCGATGAATTCCGAAGAGCCCTACGCTGCAATCGTTGCGATGGGT  
 ATTCAGCGATGCTCGTGCTGGCTTCCCGCATTGCCAAGGGCGATAAGTTTGCCTTGCC  
 GCGGCGATTATTTACTTGGGTGTTTCGGCTACTTTCTATACTTTGTTTACCGGTGCTATC  
 GCGCTTTCTGCGGTGCGGTGTGCATCGTGGTGGCGGCTATTGTGCAGCGCTCCATCAAA  
 CCACTGCTGTGGCTTGCAGTGCTGGGTGGTGGATCCATTGTGATGCGTTGATTTCTTGG  
 GGTCTTACCTTCTGGCCTCCATCAACGGAGCGGAGCGCTCTGGCGATTCCGCAACACAC  
 TACCTGCCTCTTGAAGGCACCCAAATCCCGGTTCTTTCTTGGCATCAAGCGTTGTGGGA  
 CTGTTGTGTCTTGTGGCTGATCTATTTGGTGGTGCCTTCCACAACAATGAGGTGCGC  
 GCGATGTGGGTGCGCATCGCAGTGTTCCTATGCCTGGATGGGCATGTCCATGGCGATCACG  
 CTTTTGGGCAACACGTTGCTTGGATTCCGTCTTGATACGGTGCTGGTGCTTATTTTTGCC  
 ACGGCTGGAGTGTGGGCATTGCAGATTTCCGCCTTGCCAGTGTGTATCAGCTCTACCCC  
 ACCCAAATCACAGAGCGCACGGCCACCCATCTGACCAATCTAATT

>RXA00422-upstream  
 AAGCGCCGGGCGCGGAAGGCGCTGGCTGAGGCCTTCGGCGCGGAGGTCCAGCCACTGCCG  
 CTTGACACCGAATAGGACAAATGGGTCTATCCTGGGGCGC

>RXA00422  
 ATGCCCACGAATTATGCACGCGACAACGTCATTTCCCTTGGCGTCTGCCCCGCGAGCAGCGT  
 TCCGGGAAACCCGAGCCCAAACCCGAACCTAACACTCATCGTCCGCGCCACCAACGTGCAA  
 GCGACGGCGAGGTCCACAGGCAAAATGGGTGTAACCTCGGCGATGAGCCTGGACGAGCTG  
 CACAATGTACTCAACATCGTTTTCGGTGTGGCGGCGAGCAGTCACCTGGCGTTTTCGAA  
 GACCAATTCCACCAACCCAGCGCCCCGACACCAACCTCGGCGAACTCCTGCCCCAACCC  
 GCGGACTTCTGTTTTACTTCTGGGGCTGTGGCAATTCAACCTGCAATGCGTGGAATG  
 TACCCGCGCGACAACGGCACCCCGCGCGCTGTGCATCGGCGGCTCCGGCGGCCTCGGC  
 GAC

>RXA00423-upstream  
 AGTTCTTTGAAAAACGTGGCGCTTCCAGGCCATTACCTGCACTGGCATGGTGTACGCCG  
 CTTTTATTTACGCAATCTGTGAGCTGGAGGCCCGCACAAA

>RXA00423  
 ATGACCTATCCCGTGTGAGTGTTCCTGGATAATTCTGGCGATCACAACATCATCTGGCAT  
 GTGCAAACTTATCCCGCGGCGCTGCCCACCGGGGCGTGGATTGCCGATGAGCAACAACCTG  
 ACTGACCTGCTGAAAAGACACAGTAGTGTTCCTTACCCCTGGGAGCACCGCTCCGGAAAAT  
 GCCCCCGTGGCGACGATAGAAGGGGTGCGGGTTGACGTCGATAAGCAGGTGGCAGAGTAC  
 AACAAACATGGGATCCGCTGCCAGCTTGGGCGCGCGCACTGTGGAGGCGCAGTACCGC  
 GCGAGCCGGAGGCAGAGGCTGCGTGGCGCACGGCGATGGAGCTCGTAGAGATCGCAGGC  
 GGCTGGCTAGAAATTGAAGCCAAGCGCCGGGCGGGAAGGCGCTGGCTGAGGCCTTCGGC  
 GCGGAGGTCCAGCCACTGCCGCTTGACACCGAA

>RXA00423-downstream  
 TAGGACAAATGGGTCTATCCTGG

>RXA00424-upstream  
 GCGATGTGGACCTCGGGAGCCTTGGCTTTTTTGAATCTTTCAAACATGCCACACCTTA  
 ATCAGTGAGTAGTCTTGGCAACATGGATACCAGGATGAGA

>RXA00424

TTGCAGGTAGCAGCAGGTTCCGCGCTGATTGGTGCTGGGGTTGCGGTTAATGATTACGTA  
CAAAGCCCAGTCCGCCGGGCCATCAGTTATGGTGCGTTGGCGCTTCTGGGGCGACGGTG  
ATTGCGATGGGTGAGGACCCGACTGGGGAGCGGTCCATCATTGCGAAAAGATTCCGCGACG  
ATGGTTGATCAAATCCGCCAGGAGATCGGCGATTGGGTGTCACGCCTGGTCCAGAATCT  
GATGTGGATGCCATCAGGAGCGAGGTCCGCTGGTGACGTGGCTGTTGCTGCTGTTTTT  
GTCGTGGCATTTCACCTTGGCGTATTTCTCCATGCGCATGGATGTGGCGGTGATGAGA  
AGGATCGCTAAGTTCTTTGAAAAACGTGGCGCTTCCAGGCCATTACCTGCACTGGCATG  
GTGTACGCCGCTTTTATTTACGCAATCTGTGAGCTGGAGGCCCGCACAAAA

>RXA00424-downstream  
TGACCTATCCCGTGTGAGTGTT

>RXA00425-upstream  
ACCGCAACCCCAGCACCAATCAGCGCGGAACCTGCTGCTACCTGCAATCTCATCCTGGTA  
TCCATGTTGCCAAGACTACTCACTGATTAAGGTGGTGGGC

>RXA00425  
ATGTTTGAAGATTCAAAAAAGCCAAGGCTCCCGAGGTCCACATCGCGGCGGAACGCACC  
AACCTTCCGCTTAACGATTTTCATGACCCGCCTCTTCGCCCAGGAACCTCCCTGCTCGAT  
AGCACCTCACGTTACAGAGGTCTACCGCCTGCTTCGGGAATACGACGGCCCAACAATTAGC  
TCCCAGGAAGAAATCCCCGAGAGATTCGTGAACCTCATGGATCTT

>RXA00425-downstream  
TAGGCAATAAATGTGAGATTGGA

>RXA00428-upstream  
AGCGTCGCAGGGATCGGCGCGATCTTCCTCCTTCCGATCGGCATCATCATGTGCCTCATC  
GCCGGATTCAACCGCTACTACGCAGCCCTTAAGGTCTAAA

>RXA00428  
ATGCCCCGTCTAGTTCTCTCCACAAACGTCGCCCATATCCAACAAGACCCAGGTGGCGAT  
GACCGCATCAGCGGCATCAACAACTCCCGCTCGCCACCGGCATCGATGTATTCATCCCC  
GGACCCAACTACGGCGACGGCTCCGGCGTAGTCGGCGACGCCATCGGCGATTCCCTCCAC  
CACGGCGGCGCCCAAAAGCCATCTACGCCTACAGCCGCGAAGAACTCGACTTCTTTGAC  
CCCACCTACCGCAACGGATACTTCGGCGAAAACCTCACCACCAGCGGAATCGTGTTGGAA  
GACCTCCTGATCAACCAACAAGTGCGCATCGGCACCACGCTGCTCGAAGTCTCCATTCCT  
CGCCGACCCTGCCGCACGTTTCGCCCCTGGCTCGACATCAAAGGCTGGCTAAAAACCTTC  
ACCCAACGCGGCCCTCCCGCGAGCTACTTCGAGTCATCGAAGAAGGCCACATCAACCCC  
GGCGACCCCATTTGAAGTTCTGCAGGCCCGCCGACACGACATCACCATGTCCATGGCCTTC  
CGTGCAAAAATGGGAAACAAAGACCTCGCGCGCCGGGTGTTGCAGCCAACCTGTCTCCCA  
GCGCGCTACCACGAGGAACCTACTAAAACCTGATC

>RXA00428-downstream  
TAGGGCCTATTGAATTTCTCGTC

>RXA00429-upstream  
CGATGGTGGTGCCTTTCGTGATCGCCCAAGGCACCCGGAACGGTCATCAACTTCATCGTC  
CAAAGAACCATCATTTTCCGAGTGAAGTAAGGTACCCCTC

>RXA00429  
ATGAAGACCTTCAATCCCACCATGATTGCCGGAATCATCGGCGTACTCTACTTCGTGCTG  
CTCACCTTGATTTTCTCCATCCAAGACATGGAACCTAGCAGCAGAAATCGCCTTCGGAATC  
GTCACCATCGTCGGCCTGATCGCGGTGTGGGACAACCTCCGCGACCGCAACAACCTCCACC  
TGGAACACCTGGACCGGCTCGTCGGCGGACTGCTAATCGCCGTCCCGGAATCTGCCTT  
CTTGTTGGGAAACCTCGTGCTCCTCGCAGTCGACGGCAACCCCTCAACCATGGTGAACACC  
CTGCTCAGCGTCGACGGGATCGGCGCGATCTTCCTCCTTCCGATCGGCATCATCATGTGC  
CTCATCGCCGGATTCAACCGCTACTACGCAGCCCTTAAGGTC

>RXA00429-downstream  
TAAATGCCCGGTCTAGTTCTCT

>RXA00430-upstream  
TGCCCCCGTGGATCGCCTGGACATTTATAGGGAGCTGCTGTGTTTCTAGGTATTGTGTAA  
CCTCGTGTCCGAAATCTTGATGTTACGATCGTCCGACCA

>RXA00430  
ATGAGCCTGAAAACCCAAGCTTTCGGGTTTCATCCTCACCGGTGGCCTCTCAGCCATCGTG  
GACCTCGGCCTGCTGTCACTTTTGCAGCTAGTGTTCGGCCTTCCCGTACCTGTTGCCCCG  
ACGATCTCCTTCATCGCCGGCACCACCACCGCCTACATGATCAACCGCCGGTGGACCTTC  
CAAGCAGAAAGCTCCACCTCCAGGTTCCTTGCTGTGGTGGCCCTCTACGGCGTGACCTTC  
CTGATCAACATTGGACTGCAAACCTCTGCTCCGCATTGTTTGAGAATTGGGGCTGGAAC  
GAAGCCGTCGCATGGTGGTGCCTTCGTGATCGCCCAAGGCACCCGGAACGGTCATCAA  
CTTCATCGTCCAAAGAACCATCATTTTCCGAGTGAAGTAAGGTACCCCTCA

>RXA00430-downstream  
TGAAGACCTTCAATCCCACCATG

>RXA00433-upstream  
GTCTCCAGCGACTCAAACATCAAAAATTGATATTTGCGACAAGTTGAAATCATACCCGAT  
AGTCTCGAACATACTAAATCACCTAATCAGGGGGAATTAC

>RXA00433  
ATGGATGTGTTAAAGATCGCCATCATCGCTGCAGCCATGATTGGTGTGCCGGTTCTGGTG  
GTTTTCTCATTGTGTTTGCAGGTGCACAAGTTGGCTAAGGAAGTGCCGCGGTCTGGTCGT  
CGTCCGGGTATTGGGTGGGGTGTGCTTGCTTTGTTTGGTGGGCTCATCGTGTGGTTT  
GTGTGGTTGAGTTGGGGTGGTTATTACGAGAATGAGTTTGGGCAGATGCAAGGTCCGTAT  
CGTCCGTGGCAGGTGTTGCTTGCTGTGGTGTACGATGGTTCGCGGTCACTGTGATTCTTGGT  
CTGTGGACTAGGTGGACTGCGTCTGGTCCGTTTATTTCGGCGTTGGGTGGTGCCTCGGG  
TTTAGTTTTCGCGTGGGCCATGGATGCCATTCCCTCAGGATGAAACCGGATTGTCGGCGTTT  
GGCTTAGTGATGGTCATTGTTGGTGTGGTGCAGGGCTAAATGTGGTGGCAACTCTGACG  
TCAATCGGCGCAACGATCTGGAATAACCGGCTACCCTCGAATGCA

>RXA00433-downstream  
TGACTAAAACCACGCGCCAAACC

>RXA00447-upstream  
GAGCACGGCATCGTGATTTCGCGCGTTCCCCGAGGGTGCAGCGCATTTCCGGTGACCAACGCC  
GAGGAAACTGACAAGCTGCTGCGCGGTGGGAGGCCATCA

>RXA00447  
ATGCTGGGTAGTCTTTGGCGTTTTCGCGTGCAGCACCGCAGCAGGCGCGGTGGCGTTGTGG  
GTGGTTATTAAGCTTATCGACGGCATCTCCCTGAGTTTTCCACACACCTCTCTATCAG  
GACGGTCAGCACGACAATCTGCTGACATTCTGGCGGTGGCAGCAATCATGTGCTGTTG  
AATGCCACGGTGAAACCCGCTTGAAGCTGCTTGGTTTGCCGTGACAATCATCACCTTG  
GGTCTGTTCTCGCTGGTCATCAACGCGGTAATCATGCTGCTGGCGGAGTATGTGTCAGAT

>RXA00451-upstream  
GGATCCGCCGATGAGGCCGAGGCCAGGATGCATACTGGGCGGGAAATGTCTTTGGTAGT  
CACCTGACAAGTGTGGCACATACCTACTACGGTTATCTCT

>RXA00451  
ATGAACACTGAAGAGGATGGCCTGAGCTTTCAGTTACGGCTACCTTAGTTGAAGGTAA  
TGGCAGGTACGCGAGTTTGAGGATCACTTCTCAAGCTCTCTACCTCTATTAATGCGGTT  
CGCTCGCTGCGTAGCGAGGGCGCGGCTTTCGCTGTTGTGCGTTGATGATGAATATTTT  
GTGATGGTGCCTCCACCCCAAGTAGGGTATTCCTTTTCCTTTCGGATGCGCCGATGGCT

GTCGACGATGATTTTCGCCGCCGCGGTGATGGATGAACTCGATGCGGATCTTCCAGATATC  
AACCCTGATGATTTGGACGACATCGATCCATGGCCAGAAGGTGATTTTCGATATTTTGGCG  
GATTTGGGGCTGTCTGAGGAGGTCTTCCGTGATTTGCGATGACATGGATTTGGATCCT  
TCCGAACAATTGCTGCGCATCGCGGAAGAACTCGGTTTTGATAATGATCTGGCTCGGGTG  
GTGGGATTTCGAC

>RXA00451-downstream  
TAGTGGGCGTTTTACCTGTGCAG

>RXA00455  
ATTTTGTGTCGCGCTGTTTGTGTCAGTCTTTCTAATTTCAAATATCACCGCAACCAAGGGC  
GTAGAAATCGGCCCCGTTGGTGACAGACGGTGCGTTCTTCCTCTTCCCCATCTCATATGTG  
TTGGGCGATGTTCTAGCCGAATGTTACGGCTTCAAATCCACTCGTCGTGCCATCTTACT  
GGTTTTGGCATCACGATGCTCGCGGCGCTGTCTTTCTACATTTCCATCTGGCTGCCTGGC  
GCAAGTTTTCTGGGAAGGCCAAGAAGCTTTCGAAGCAACGCTCGGCCTTGTTCCACAGATC  
ATCGTGGCATCACTGGCGGGCTATATTGTGGGTCAGCTGCTCAACGCCAAAAGTTCTGGTG  
GCTATCAAAAAGCGCACGGGTGAAAAGTCCCTGTGGGCGCGCCTGATTGGTTCACCGTT  
GTCGGAGAATTTGTGATACCTGTGTTTTGCGCCATCGCAGCGCCAGTGATCGGTATT  
GCCACCGCCCCGGATTTTCATCAACTACGTGTGGTGGGCTTCGTGTGGAAAACCTTCTA  
GAGGTCATCCTCATGCCCATCACCTACGCAGTCATTAGGTGGGTGAAACGCCCGCAAGGT  
TATGAAACCTTCGACGCG

>RXA00455-downstream  
TAGTACCGGCCTAAGAATTCTTC

>RXA00457-upstream  
AAACTCTCATGTTGGTTTCATCGTGGTTTTCATGAGGCGGGATTTAACTAGAGATTGTTAG  
CCAATCGGCCAGACACTTCCTCCTAGAAAGGTCCCTCCTC

>RXA00457  
ATGACCATTGCTCTTGAACACCCAGTACTGCACCTCCACGGCGATCGCGTTGCCTGCTCGT  
TTTCAGGCGAGCTATACGACGCGTTTGGTGGCGGTGGGCGTCGATAAGCGTCCTTCTGAT  
TTTTGGTTGGAAACAGCCGGCACGCCGAGCGGGCGATGTGGTGATTGCGCGGGTGACG  
GCGATTAATAATCACAGCGGGTGGAGACGCCGAGTCGCGCAAGGCCATTTTGTTTGAG  
GGGGTGTGGTGATGTTGGCGTATGGGCACCGGTATGCGGCGGATCAGTTTTTAGCGCAT  
GTACCGGAGGATTTGGGGCCATGCCATTTGGTGGCGGTGGTGGCATCGCGGGAACGGTG  
ACGGCGCTGCACGATCGGGTGGATGAACCCACAGAGATTGAACCGTTGGGATTGCTCACC  
AATGCGCGCGGAATGTGAATGTACGGGACTTTGCGGCTTTTGATAATCCTTTGAAAGTG  
GAGGCTCCCAACAAGCGTGCGCAGGTGATCGCGGTGCTGGGAACGTCGATGAACTCTGGA  
AAATCCACCACGCTTGCTGCTTGGTCAATGGTTTGGCTGCGGCGGGGCAGAAGGTGGCG  
GCTGGAAAGATCACGGGCACTGGTGCTGGAAATGACCGCATGATTTATCACGATGCTGGT  
GCTCACAGCGTTATTGATTTACCGACTTTGGCTACCCAACCTACGTTCAAGCTGAATTC  
GCGGAGATTCTGTCGCTGAGCGTCAACATGATTAATGTGCTGGCTGATTCTGGTGCGGAT  
ACCGTGATCGTGGAATCGCGGACGGAATTTATCAGGGCGAAACCTCGCGGCTGTTCGCG  
GATCAAGTGTTCCAGGAAGCCGTGGATCATGTGGTGTCTCCGCTGTTGATGCCCTGGGC  
GCGAAGGCCGGTGTGCAGGAAGTGCAGGCGGCGGGGCTTCATGTGGCTGCGGCCCTCCGA  
GTGATGACGGCTTCGCCGCTGGCCACCGCGGAAGCTGCCGCTGTGCTTGAAGTTCCAGTG  
GTGCCCACTTTTGATCTCACCAACCCGGAGATCGTACAGCGGTGCTAACGGATCATGCC

>RXA00457-downstream  
TAGCTTATGGCGTGCTCGTCGCA

>RXA00462-upstream  
TGAAGCCTTGTCATTTTCTACATGTGCATCCGCTTTGACTACCGCCCTTTTCCGCCAGT  
CCTTTTAGAAACCAGCAACACAGAAAGCAAGTGATCATTT

>RXA00462  
ATGGAAGCTATTGCCATACTATTTGTGCTATTGGGGCGATTCTTGTCGTCGCGGTTCATTGTC

CTCGGTATTTTCTTCTTAACCTTCACGCACCTGGATCAAGGTGGCTGCAGCTGATGAAGCG  
 CTCATTGTCTCTGCGAAGAAGAAGGGGGAATCGCAGGTCATTGTCCACGGCAAAGCTGTG  
 GTAATGCCTATTACCCAGACTCACCAGAAGATCTCTCTGCGTTCCCGTCAGGTAAATATG  
 CAGGTGACGGCACAAAGCGATGACAATGTCACGTTGAATGTCGAGGCTGTTGCGCTGGTG  
 AAGATCGGTTCCGAAGCTGAGTTTATTCGTCGCGCTGCCAGCGCTTCGCTTCCAGTGAC  
 AAAGAAATTGTTTCGGTTTCACACAGGATCAGCTGGAAGGTGTGCTTCGTGGTGTCTGGCG  
 CAGCAAACAGTCACGTGCTCATGCGTGAGCGTAAAAAATTCTCCGAGCAGATCGCTGAA  
 ACAGTCATCCCCGAGCTAGAGAAGCAGGGTTTGATTCTTGACTCCTTCCAGATTCTGTGGC  
 ATCACCAGATGATGTGGGATACATCAAATCCCTCGGCGCACCGGAAATTCAGGCAAAGAAG  
 CAGGCTGCGGAAATTGCAGAACTGAAGCTGCTCGTGCGATCGCTAAATCACGCATTGCT  
 AACCAAGAGGCAGATCTGGTTGAACAGACCCAACCTTGATGCCAACAAGGCTGCCGCTGAT  
 GCTCAGGTGCGTGAAGCCCGTGCCAGGCTATGCAGGCTGAACGCCTTGCCGATGAAAAA  
 GCTCGACTAGAGGTTCTTCGCCAACAGGCTGAAAATAAGCAGATCGAGCTGGAAGCCGAA  
 GTGAACAAGGTGGCCGACGCTGAACGCTACCGCCGCAAGCAGGAAGTCGAAGCCGATACT  
 TTCGAGCAAACCAGGCGCGCACAGGCTCAGGTCGAAATCGCAGAAGCCGAAGCTACCGCT  
 GCAAAGGTTCTGTGCAATGGCTGAAGCCGAAGCTGTTTCGATTGAAGGGACAGGCAGAGGCA  
 GACGCTATCAAGGCAAAGGCCGAGGCCACCGCGAAAACCAAGAAGCACTACTCGCCAG  
 CAAGCCATGGAAATCCTGCCGGAACCTCATGAGCAACTTCGCCTCTGGATACGCAAACATT  
 GGATCCATGACAGTGCTCTCCGGTGGAGAAGGATCCGAGAATTCCGTGGGTTCACGTTTT  
 GCCGGTGAACAAGCACTTGACTGAAATCCATTATTGAATCAGTCAAGCAAACCACCGGC  
 ATTGATCTAGCTGAGATCATCCAAGGCCGTGCTGCTGGACATGCACAGGGCTCCGCTCAG  
 GGTGCAGCGATTGCTGAAGCGCTTTCACGCGATGAACTGTGGAAGATCGCTCTGAAAAA

>RXA00462-downstream  
 TAATCTAGCTGCCCAGCGCATCG

>RXA00463-upstream  
 TACCACGCTAGTCGCCAGCACTCTCGGATTAAGCGGATGTACCTCCGTAACTTCCAGTGC  
 TACGAGCTCCCCTGAACCGCCGACTAAAGTTGCGGCGGCA

>RXA00463  
 ATGCAGACAACGACTGGGGAGACGTCGATAAGCAATGAAACCTCGTTTAAAGCCTCACGC  
 GAAACCTCGCTGACGGCGCTGGGTTTCTTGACTATCTTGACGAGGAGCAACGCGCCGCC  
 TTGCTCGGTGAAGGCCTGGACATCAGCACGCTGACCTGGGCCAACAGGTTACCGCGCTG  
 CGTGTGCTGGAATCCCTCTTCAATGAGCATGCATACGAGCTGGTTTCTGCAGTGATTGAG  
 CATGTAGCTCAAGAACCTGGCGATAATCCACACCACTTTCTGAAGTTCTCGCCTGAACCA  
 TCCACCGAGAATTCTTGGAATTGACCCTGGATGGACCAACTGTGCGATTGAAAGTCACT  
 TTCGATCCGGACGGTCAGATCACTTTCAAGGATGCTCATTTGGGCCTGAGCCAGCTGAG  
 GTCGTTAGTGTCAGTGAGGCGTTAGATACCTCCTATTTCGGAATCGCAAATCAAAAAAGCT  
 GCGGAACAACCTGGTGGGAAGCCTCAATCCAACCCAGCAGGCAGCGCTCCAAGGATCCGGT  
 TTGCGAGGAGCACAGCTCACTGAAGAGCAAAAGACCCTGTTCTTAAAGATGACCTCCAAC  
 TGGATCGACCTTGCCAATGGCGATTCCGGCTCTGAACAGCAAGAAGAAATCGCTGATACG  
 TTCAGTGATACCTACATCATTTGGAATGAGCAGAAAGATGGCTCAGCATTCTTCCAGATG  
 AAAGGCCCTGAGCTCGACTTCAGCTATAAAGAGAGCGTGCCTGAAAACGCTGAACCTCTCT  
 GCACGGGGAGTCCCCAATATTCAGACCTCTTTTCAGTCACCT

>RXA00463-downstream  
 TAACTGGCATTGGTTTAGTTTGG

>RXA00468-upstream  
 GGCAGAATTTTGTCTAAGTTGCCTAAATCAAGCACCCGTTTGAATAAGTGTCCACCCTTT  
 GGTTTATTCTTGAATCACTTAAGTTTGAATTTTAGTT

>RXA00468  
 GTGAAAGTAGTTGATGCACAAGTGGTTATGGGGCCAACCCACGCTATGAGCGGTGCAGCC  
 GTGGGGCTTGCTGTGTGCTCAAATTCTCCAGCAGAAATGGGGTGGGGTTACCACCGCCACG  
 GAGGCTTTTATTTATGCGGGTTTAGCGGCGGGTGACGCGTCTCCCGGACCTTGATTCA  
 CCGCAGGCCACGGTGTGCGGTTCTTTTGGTCCGATTACCCAAGTGATTTCGCGTTTACA



GAGAATATTTGCCAAACTTTCGTCAATGTCACCAGGGGCAGGAAAGACAAACACTGCAAC  
AACGGGCACCGCACGTTGACACATACGGTGTGGAGCGCTGCTGCCACAGGCGCTGGTGCC  
ACAGCGCTAATTGGCGCCTATGGAAAACCTGCGGTGATTGGTTTGTCTGTTTTCTTCCTC  
GGGCTCGCCATTAGAGGTCTCATGCCTGAATGGTCAAAGAACGCAGATTGGCTTTTAGTT  
ACTGGAGCTTCCGCTGCATTAGCAGTGGGAGTATGGAATTATGCTCCCCGAAAGTTCATTC  
GGCATTGTGTAGGCTCCGCCATTACAGTTGGAAGCCTGACCCACTTGGCTGGCGATATG  
GCCACTAAGGCCGGTATCCAGCATTGCCCCGGTCATTCCGCTGAAGGGCAAACGCTGG  
TGGAACCTCAAATTGCCTAAGTTTTTAAGCATTCGTGCCAACGGTCCTGCCGATAAGTTC  
TTACTGTTTCGTATTCTCGGTGGCGGTTCATCATTAGATTGGTTTGGTCTCATCGGGAAAT  
ATGAGCACCATTATGATGAATCTGCTTAGTCCTGCACTG

>RXA00468-downstream  
TAATTAATGGCAGTTGCGTTTTCG

>RXA00469-upstream  
TGCCCCTGCGACACCAAACCATCAGGGAAGACCCTGAACGCCACCTTTTCAGGGCTTTCC  
CCCATTCACTTATCAGCCTCAACACTCCACAATAGAGTCT

>RXA00469  
ATGAGTACTTTTCAGGAGCCCCACCACAACCAGGGATTTCATCCCTTTTGCCCCAACCTGGT  
TATGAAGCTCCAACACCACACCTTGCAACTGGTACTTTTCAGCAAATGTGGCAGACCCGC  
CCCGCACGCATCCCTGCCAAGCAAGGTGGTCACGCCAAAGTAGCTGGTGTCTGTGAAGGC  
ATTGGTGTGCGTTATCAAATCGACCCGGTGCTCATTTCGTCTATTTTTTCGTGGTCACTGGT  
GCTTCGGCGCCGGTGTGCGAGCCTATCTCATTGCATGGCTGTGCATGCCCCGCTACTCC  
GTTCCGGTCTCCCCCATCGAAGCTCTCTGGACCCCGGGCCACACCAAAGACCCGAACCAC  
GGCTGGTGGCTGGTCATCGCGTTCTTTATGTTCTCAGGTGTTTTATCCTCCGGCGCTGGA  
GGAATATCCGGCCAGCAGCAGCCATTACTTACCTTTGCCTTTTAGCCATGTGGTGGGCG  
TTGCATAAGAAACAACCACTTCCACCCCGCGGACTACTCACCCTGAATTCACTGTTTCT  
GAGGATGCCACCATGAAAAACGAAGATCTCTACCCACGACCCCAACCAGATCTAAGCACT  
ATCACCCCGCTTGAGGGCTACTATGCACCCTTCGCGCAACAAACCCCGAAGCGCCTCAT  
TGGGATCCACTTGCCCAAAACCAATACAACACCTGGGATGTACAAGTCCCTCCACAAAAG  
CCTCAGAAAAGCGCCATGTGTGGCCATGGATTGTCGGCGGTGTAGTTGGTACCGGAGTT  
GTCATGAGCGCCCTCGCAGGCCTGTTTATTTCAAATATCGATCCCATCTACTTTGAAGAC  
GACCCTGGAATCGGCGATGTCAATCTCATCCCCACCAACGATGAACTCCTCAGCAGCTAC  
ACCTCTGGTGTGGGCGAAATGAACCTAGATTTTCAGCAACCTCACCCAACTTGATCAGGAA  
CAAAACGTTCAAATCACCTCAGGTATCGGTGAAGTCATGGTGACCCTGCCTGATGACGTG  
CCAGTAAGCTTGAGTTGCTCCGCCGGTGTGGGCACAGCGCGCTGTGATGTTGGAGACCTC  
GCCGCCACAATGCTGATTTGGAAGGTCCGATGTTGAATCTGGTTGTAAATCTGGAATC  
GGCGATGTGAAGGTGGAGTTTCGCTGATCAGAATGAC

>RXA00469-downstream  
TAGCCCGACCCTATGTGAGTAGT

>RXA00472-upstream  
GTCTAAACGCTCCCGTGCTTTTCGCCACAGCATTAATCGCCTTGGGCCTAGGGCTATCTTC  
CTGCTCTACTACGGAAGATACCGCTATATCGGAGACGACA

>RXA00472  
GTGTCTAGTGTTGCAACGAAAACAACTTCGACTCTGCCTGAAATGAACTCCGCAGTATCA  
GCAGACGGCGTGACGATCACTATCGATTCTGCCTTCACGACAGACTCTGTAGAAATGGAA  
TCCCTAGACAGACCTTCTGGCGACATCCAACCCGAGATGTCTAGAGAAGACGGAATCTTT  
GTCGTAGTCGAAACCACTATAAAGAACGAGAGTGGAGCAGATATGGACATCACCTGTGCA  
TCCACTGGTTCAACTGTCTATGCAGAAATCTCCACTAATCAAGAGGCCGTATACCAACCA  
ATACGCGATTTATTCCTCATCCCAGGAAACCCGGAATGCAACCATAATCTAGGATCCGGT  
TTCGACGCACCAATGACTTGGGTATTTCAAATCCCTAAAGATGCCACTGCGGAGCGATTT  
GGATTACACATAGTGAGCTCGGTGATGGGAACTAACTTGGATTGCACTCAATGATTTG  
AGTAATTCGGAGCCAGCTACTGAATCAACTATGCGAGACGAAGCAGCAATCGATCCGAGC  
ACCCCTCAGCAAACTCCAGTACAGGAACTGTGATCTCACAAAACACCATTTGAAACTCCT  
GTAGCCCCTGCTCCTGCGGTACCTGCTTATGGCGCTTCTTGCCCTGTCTCGATGCTCCAG  
CAGCCAAGTCAAGCTGCAGATGGTTTCAGCTTTGGTCTGCATTTATGCAGGAACCCCCAAC

CCAATCTGGGTCTACGGCCCAGAACCTCTCGGAGTCGGGACTGCTACACCGGGTGGGGCA  
TGCGAAGGATACGAGGCCGGTGGGCAAGATGCTTCTGGAAATATAATGATGTGCTCAGGC  
GGACAATGGGTCTATGGGCCA

>RXA00472-downstream  
TAAATCTAAAATCAAAGAGTGCA

>RXA00473-upstream  
CCACCCCTTTTCTCACACCAGCCCCGCATGAACAGGCTGGTTGCACACCGTTGAAAATGA  
GTGTTTACTGGAACATCATGAGTGGAACAGGTGTTTCGAAAG

>RXA00473  
TTGTGGGGAGATGGCACTCCGGTGTGCTCCCTGACCTTTCAGGATTAAGTAGAGCGGAG  
CGCATTGATGCGTTGCGTTCACGCATGTCCACCATGGGTGCTGCGGTGCCAAAGTTTGAG  
CCGTGCGGTGGAAGAAAGTGCTGAACAAAAGCAGGATTCTCTCGCCGAAAAACAGGACATA  
GTTGCAGTTCCTTCCGCTTTTTCTGATCTTTTCCCTGGGGATGGTTTGCCGCGTCGTGCG  
GTTACTCAATTGGTTGAACAGCCACTTGTGGTGGTGGACTTCCTGGCTCATATTACTGCC  
CAGGGTGGACACGCTGCGGTGATTGGGTGGAAGGATTTAGCCTACGCCGGGGTGATTGAT  
TCCGGAGGTGTGTGCGAGAACATCATTGCTATTCCAAATCCTGGTACGGAGCCACTGAAT  
GTGGCAGCGGTGCTGTGTGAGGGGTGGATGTGGTGTGTACAAAGGCCCGGAGATTTC  
CTGTGCGCAACCAGAGCGAGGCCGTGCTGGGAAAGCTGAGGCAGGGGACTGCTGCCTTG  
GTGATGGTTGGCACGAAAGTAAGCTCACCGCGCTGTGCGGTGGATGCAGAGATCACTGAT  
TATGTTGGCATTGGTGCAGGTAGTGGCGTATTCTGTGGCGTTGAGATGCAGGTGCGGGCT  
GTGTGCAAACTCACGGTGTGCGCAGCGGAAAAGTCTGTATCAGTAGGCCCTCAGGATGCA  
GCATTGCTTGAGCCTGAACAGCCAACAACGTTGCGGGCGGTCCCA

>RXA00473-downstream  
TGACGCGGGTGATGGCATTGTGG

>RXA00474-upstream  
GTGTGCGCAGCGGAAAAGTCCCTGATCAGTAGGCCCTCAGGATGCAGCATTGCTTGAGCCTG  
AACAGCCAACAACGTTGCGGGCGGTCCCATGACGCGGGTG

>RXA00474  
ATGGCATTGTGGTTTCCGGATTGGCCTGTGTCAGGCGGTTTCATTTGGATGAAGATGCTCCC  
GCGCACAATAAACCTGTGGCGATTGCTGCGCATTACCGCATCCAGGTGTGTGGCGTGGCT  
GCGCGCAAGCGTGGGGTACGCTCGTGGGATGAAGGTTCCGGCAGGCGCAGGCTGTGTGCCCT  
GAGCTGGAGGTTGTTGACGCGGATGCAGATCGTGATGCCCGGATGTTTGAGGGCATCGTG  
GCATCGCTCGGTGAGGTTGCCCTCCAGCGTCGAGGTGCTTCGTCCGGGTCTGGTCGCGGTC  
GATGCGGGAGCTGCCGCGCGCTATTACGGTTTCAGAGGACATCGCTGCTCAGATGCTTATC  
GACGCCGCCCTGCCCAAGGCATCGACGTTTTTCGCCGGGGTTGCGGATGAGATCACGACG  
GCCGTATCGCGGCGAGGGCGAATGGTGGGACTGTGGTGAAGAGGGAGGCGTCGAGAAGC  
TTTTTACAGCAGCAACCCCTGGGCGTGCTGGCGGCCGAGGAAGCGCTGGGTGTGAGGCG  
GAGGTGGTGC GCGCGCTGGCGGATCTGGGCATGCGCACGCTTGGTGAGCTGGCGGAAC TG  
CCGGTAGAAGCCGTGGCGACGCGTTTCGGCAACGCTGGTCTGCGGTGTCACAACATTGCG  
CGTGCCAGGCACGATCGTAAGGTGCGGCCACCGATCACGCATGCAGATTGGGAGGTTTCG  
CATGTGCCGGAGGAGCCTATTTTGCCTGTGTCAGCGCCCGCTCGTTTGTTCGCGCAACCTT  
GCCTCGCGCCTGCATCAACTGCTGAGCAAAGGTGGCGTGCTGTGCCAATTGCTCAAGGTC  
ACAGCCGATTTTCACTACTGGTGATACGGTGAGCAGAATTTGGCGTACCGGTGAACCTTTA  
ACGGAACAGGCAACTGCGGATCGGGTGCCTTGGCAGTTGGATGGGTGGTTGACTGCGCGC  
GGTGTGCATTCCGATGATCCGAATGAGCACGATGGGATTACGGCGTTGTGGCTTATTCCCT  
TTGGAATGTGTGCCACCGGATATGGCCAGCGGCGGATTGTGGGATACCGGGCGCAGCCAG  
CAGCATGTGGCCAGACAAGTCATTGAGCGTGTGCAATCAAGCTTGGGCGTGATGCGGTG  
CTGCAGCCTGTTCCGGCTGGTGGTTCGGGGAGTAGAAGAACGCATTTCATTTGTTCCCTAT  
GGTGAAAAACGTGATGCTATCCGCAATCCAGCGGGGTCGTGGCCAGGGAAAAATACCAGGT  
CCGCTGCTGCTCGGTGCGGTGGGATCAACCACCGGCCCTCGCAAGTGACCATGATT  
GATACAGAAGGGCAGCGTATTTACGTCACCGCAGAGGCATTGCTCAGCTCGTCGCGGTAT  
GCCTTGCTCTGGGGGCCGCGCCGCTATTTGATCACTGGCTGGGCTGGGCCATGGCCGGTG  
GATGATCGATGGTGGGAGAAAAACGGCACAAAATATGCCCCCTCCAAGTGGTGGGACGG

GCAGTATCTGAAGAAAGGCAGCTCAATGCGTGGCTGTTGATGTGGAAAGACAACAAGTGG  
CGGATTGAGGCCACATAT

>RXA00474-downstream  
TAGGAAACTACTGCGCTAAACA

>RXA00475-upstream  
GGGGTGTCTGTAATTTTCACGTCTCCTGGCGTTTTTAAGACGAATTACAACAATTCGTTT  
ACGATTGAGCGAAATTGGGCGTCTTGCTTAGGTTTCGGGG

>RXA00475  
GTGACCCAGGGTTACGGTGTGTGCATGATTGTGCAGCCAACTTCTCATTCAAAGCATCGT  
GCCCCCTGAAGACTCTAGCGATTGTCGGCGCTAGCGCGTTGACTCTTGCGGGTTGTGGA  
ACCTCCAATTCCACCACCAACGATGCTTCTTCTGTAACCCAACTATGTCCGCAACTGCG  
GATGGCGCACAGTTGTCCAACGAAGCTTCCACCGGCCCAACCGCATTGGGCGAAGCCGAT  
GTAGCAATGAAGACTCTCCGACCTGATGCGCCTGCACAGCTCATGGTCACCGATGTTTCGG  
ATTGGCTCTCACAGTGGCTTTGACCGCGTGGTATTTGATCTCACTGGCACCGGAACCTCT  
GGTTGGTTTCAATTGATTACACCTCCAATCCCACCCAGCAGGGCAGCGGAAACACCATCAAC  
TTCACGGGCGATACAGCGCTGAACGTAAATATTGACGGTACTGTTTATCCTTTTCGATTG  
GGCCTTGAGGATCCAGAGATCGGCACCGTGGATGGCTCCGGCAGCATTGTCAACCGAGTCT  
GTCAGCGCAGGTACTTTTGAGGGACGCTCCAGTTTCGTCATCGGCCTCAACGGCAAGCAC  
CGCTACTCGGTCACTGAGTTGCAGGATCCGCACCGTCTCGTTGTGGATGTTTTAGCGCAG

>RXA00475-downstream  
TAGTTTCCTAATATGTGGCCTCA

>RXA00476-upstream  
GTGAACGAATTGTTGTAATTCGTCTTAAAAACGCCAGGAGACGTGAAAATTACAGACACC  
CCAGACATCAGATGGAGGCGGCGATACTAGGGTAGAGGAC

>RXA00476  
ATGACTCTTCGCTGTTCTGACGTCAATGTTGAACCCCTGCCGGGAACGGCAAAAACAGGT  
TCTGGGTTTGTCTCCTTGAACATGCTGGCTCGTGGAGCCGTGATGTTTTAGACGGCGGA  
ACATTTGATCCTGAGTTGACTGATCAATTGAAGAGGCACCTGAAAGCTTCCGGAATGGGT  
CTGCAATTAATTAGGAAGCCGGGAAGGGAGGGTTCGAAACGTGAAAAGCATAATCTTTTT  
CTCGTTTTTGTGAGGCCTCAATTATTGAGCACCTGGTGGTGGACGCGCCGGCTGATGTT  
TTGGATCTTGATTTAAGCGGGCCGGGCAAAAACAATGCGCAGCGCATGGATGATCCGATG  
CTGCTGATTTGTACGCATTCGAAGCGCGATGTGTGCTGCGCGATCAAGGGGCGTCCGCTG  
GCAGCTGCCGTGGAGCCACAATTTGGGCGCGTGCATGTGTGGGAGGCTTCGCACACCAAG  
GGCCACCGTTTTGCGCCATCGATGCTGCTCATGCCGTGGAATTACTCTTATGGCCTACTT  
GATGAGGCCGAAACCGTGCAGCTTTTCCAAGGCGCGTTGGACAACAACTCTTCCTGCCG  
GGCAACCGTGGCCGAGGAACCTTAGATGCTCGTGGCCAGGTTGCAGAAATTGCCGTGGCG  
GAAGCTTTCCGCGAGGCGGTTGCTCCTGCGAGTTTGCAGGTTGAATTCGAAGATGATTCT  
GTTTTGGTTACTCATCCCGATGGGCGCACGTGGGTGTGGAGCTTGAACGCATCGAGGTC  
GACGGCGTGGTGTCTCGTGTGGTGATCAGCCGAAAACCTGGAAAAGCGTGGGTGGCTAGG  
CAAGTTACAGAACTGATCGGA

>RXA00476-downstream  
TAAAAGCAGAGTTATATCTGATG

>RXA00481-upstream  
GTCCATAAAAAATAATGTGCCCTACAAGAAATTTATAGTATCCCATGAGTTAATATTTTAA  
AAATAAACTTTATCTGACTTTGTAGAAAAAGGTGATTACT

>RXA00481  
ATGCTGAATATGCAGGAACCAGATAAAATCCATCCGGCAGAACCTACACTTCGTAATATT  
TATGACGTTAAACTAGTGATCCCAAAAGTGAATTAGTTGATCGTTCTGGCATGTGCGAA  
GAAGACATTGCGCAAATTGGGCGGCTAATGAAATCGTTGGCCAGTCTTCGCGATGTGGAA

CGTAGTATTGGTGAAGCCTCGGCACGTTATATGGAGCTAAGTGCCCCTGATATGCGAGCT  
TTGCACATATTTGATTGTGGCGGGCAATGCGGGCGAAGTGGTGACTCCAGGAATGCTTGGA  
GCTCACCTTAAGCTTTCCCCGGCATCTGTAACAAAGACGCTTAATAGGCTAGAAAAAGGT  
GGGCATATTGTTTCGTAATGTGACCCCGTCGACCGCAGGGCTTTTCGCCCTCATGGTCACT  
GATGCCACTCGTGGAGAGGCGATGCGGACGCTTGGTAAGCATCAGGCGCGTCGTTTGTAT  
GCTGCTAAACGATTAACCTCCACAAGAGCGTGAAGTGGTTATCCGATTCTTCAGGATATG  
GCACAGGAGTTATCCCTTAATAATGCACCATGGCTCAACACGGAG

>RXA00481-downstream  
TAGATGACCATCTACGTTAATTA

>RXA00485-upstream  
TGCAGCCTCTGTAAAGCAATCAGACGGGATTTACGCCAGTACTTCAGTCCAGTCAATTTTC  
GGAAGGCCCACTGCAGTGGCGGCCAATCCTAGAAAGGCCGA

>RXA00485  
TTGCCCAAGGACCTGGTGAGATTGCAGTAACAACGGCCCCGGGTGCGCCTGAAGTTGGT  
GAGCACGTATCCATTCGCCTGTCCCAAAACACTGAGGACACTGAGGTTCTTGTGGTTGGC  
GTGGTGGAGCCAGCGGCGCAGGAACTTTAGGTGGCGCACCGTTCGTTGTGGCGTCTCCT  
GATCGCTGATGAGGTGGAATTTCTCCGGTGTGCGGGGTGAATTCCGAGTGGCAACTTCC  
GATCCTGCTCGCTAGAGGCTGCAAGCTTTAGCGACGCTACGGTGGTGGTTGCTTCGGCG  
GAGGGGCACGTCGATAAGCTTGCTGATTCTTATTTGGGCCAGCGAGATCGCTATTTCTTG  
CTGCTCGCAGCGTTTGTGGCAGTGGCTGCTGCCGTGGCGTTTTTGGTGGTCTTTTCTGCA  
TATTCGGTGTCTACTGGTGAGCGAGTTCGCGAGTTCGGGCTGATTCTGTTTCACTGGGCGCA  
TCGACGCCCGAGATTTTGGGGTCACTGATTTTGAAGCCGGCATCCTCGGTGTGGTGGCT  
GCTGGTTTTGGTGGCGCCCGCGGATTGATGGCGGCGCGTTTGTGGCGGATAATGCCGCA  
CGTTTTGGCATTTCGTGTGCCCATTGATGTGATTGATCTGCCAAGTAGCACGATGTGGCTC  
ATCGCTGGCGTCGGCGTGGTGATGTCCGTGATTGCGGCATTACCGGCAGTGTTTCACTGTG  
TGAGAAAATCCGCGAGTGGGAATCACTGAGTACGCCTGCTATTTTCAGGAGTCTCCCCCTGG  
TTCCGGTGCATTATGGTTGCTGCTCGCGGGCATTTGTGGGCGCCGGCGGAATGTGGGCGTAT  
GAGGCAACCTCGGACTACCGCGGCATGCGTTTCACTGGCTTTATCCATCGCCGGTTTCAAGC  
GCTTTGGTGTGTGCGTTGTTGATTGCCACGGCGGTGCTCGTGCCCTGGTTATTGCACGTA  
TTCTCCAGGATTGTGGGCGGCACCGTCCCAACACTTCAGTTGGGATTGGCGTTTGCAGCA  
AAGCAGAAATCTCGTTTCGGCGGCGCTGATCGCTGTGATTCTTGCTGGTTCTGCATTAAGC  
TCCGCTGTTCTGCATGGCCAGGCACATATCGGCACGCATTTGGTGGCCGTGGCTAAAGGC  
ATGGGCGGCACAGACATGATTGTTACAGCGCTTGATGGGGAAATCCCCGCCGGAATGCTG  
GAGGAAATCTCTAGCATCGACGGCGTGAAAACCTGCCATCGCGCCAGCCACCACCGCTGTG  
GAATTGGAAGATTCCGGCAATTTCTCTGTGCTCATGCTCGCTGAAGAAGACGGAGCCTCC  
GTGATGCGCGCAGGCGATACTGGTGCACACAGCTGGTGGCCTTGTTTTGGGCAGAACTCT  
CCTGACCAGGATGCTTACCCGGCCGGCCAGGCTGCAACATCATTTGTCGCGGATACCCCA  
ACGCGAGGCGGAAATCTTCCACAGCGACAACACTTCTCCATGATCGACCCAGCACTCGCC  
ACCGGCCCCAGCACACACGCAACGTACTGATCCTGCTCGACGGCGACTCCAACCAGGCC  
CCCACAACGCCACGGCGCAGGCGGTACGCAAGACCATTTCGCTTTTCGACGGACGATAC  
TCCATCACCGAGGGTTTCTCCGCCCGCCAAAACACTTTTGAAGTGGTTTCCCGCATCACC  
ACAGTGGCACTCACCATTCTCTAGCGGTGCCCGCGATCGTTATTTGCTGCGCACCATTGGA  
CTGACCTCAACTGGTCAAGATTCTGGTGTGCTATTGAAATGATCGCGCTCTCATTTGCCG  
GCTGCCATTGTTGGTGCAGTTTTCGGGAGGATTCTTAGGCAGATTCTGTTGCCAGTTCTGCC  
ACCAACACCGCTGCGACGGCACCACTTCAAGTAGACATTCTCGGCGGAACGGTTCTCGCG  
ATGGTTCGAGGATCTGTACTGTGCGCGCTCATCGTGCTGGCGAACAACGACGTGGGTG  
GTT

>RXA00485-downstream  
TGATTATAAAATCCAAAAATCGA

>RXA00486  
CATGCGATCATGGCAGCAGTCGACCATGCCCCGCGCAGCCGTTCTAGATTTCGCTGTCTGAA  
GTGTCCGGAACGTTGAAAGTCACCTCCTTCCAATCCCTGCTGTTTACCCTTGCCCCGAAA  
GCCATCGCGCGCCTGACCGAGAAATACCCACACCTGCAAGTAGAAATCTCCCAACTAGAA

GTCACCGCAGCGCTCGAAGAACTCCGCGCCCGCCGCGTCGACGTCGCACTCGGCGAGGAA  
TACCCCGTGGAAGTCCCCCTTGTTGAGGCCAGCATTCACCGCGAAGTCTCTTCGAAGAC  
CCCATGCTGCTCGTCACCCAGCAAGCGGCCCATACTCTGGCCTCACCTGCCAGAACTC  
CGCGACATCCCCATCGCCATCGATCCACCCGACCTTCCCGCGGGCGAATGGGTCCATAGG  
CTCTGCCGGCGCGCCGGGTTTGAGCCCCGCGTGACCTTTGAAACCAGCGATCCCATGCTC  
CAAGCACACCTCGTGCCTAGCGGCTTGCGCTGACATTTTCCCCCACACTGCTCACCCCG  
ATGCTGGAAAGCGTGACATCCAGCCGCTGCCCGGCAACCCACGCGCACGCTCTACACC  
GCGGTCAGGGAAGGCGCCAGGGGCATCCAGCCATTAAAGCTTTTCGACGAGCCCTCGCC  
CATGTGGCCAAAGAATCTTATTTGGAGGCTCGTCTAGTAGAG

>RXA00486-downstream  
TGAGTTCTTGAGCCTTCAGAC

>RXA00490-upstream  
GATTGAGCACGACACCTCCAAAATTGTTTCAGTATTACTTAACTATAGTTGGCTGTTTTTC  
GATCTAGTCCTTAAAGGTTTCTTTGGCAATAATCAAGGGC

>RXA00490  
ATGAATAAACAGTCCGCTGCAGTGTGATGGTGATGGGTTCGCCCCATCCCTGCAATTT  
GGTGCTGCCATTGGAACGCAGCTTTTCCCCCTCAACGGCCCCCTGGGCTGTACCTCTTTA  
AGGCTGTTTCATCGCAGGCTTGATCATGTGCTGGTGATCCGCCCCGCGACTTCGTTCCTGG  
ACTAAAAACAATGGATCGCCGTGCTGCTGTTGGGATTATCTCTTGGCGGAATGAACAGC  
CTGTTTTACGCATCCATCGAACTCATCCCGCTGGGTACCGCCGTGACCATTGAGTTCCTC  
GGCCCCCTGATTTTCTCCGCGGTGTAGCCCGCACGCTGAAAAACGGATTGTGCGTGGCT  
TTAGCGTTTCTCGGCATGGCACTACTGGGTATCGATTCCCTCAGCGGCGAAACCTTGAC  
CCACTCGGCGTCATTTTTCGAGCCGTCGCAGGAATCTTCTGGGTGTGCTACATCCTGGCA  
TCAAAGAAAATCGGCCAACTCATCCCCGGAACAAGCGGCCTGGCCGTCGCACTGATTATC  
GGCGCAGTGGCAGTATTTCCACTGGGTGCTACACACATGGGCCCGATTTCAGACCCCA  
ACCTTACTCATCTGGCGCTTGCCACAGCACTTCTCGGGTCGCTTATCCCTATTCGCTG  
GAATTATCGGCACCTCGCCGACTCCCCGCCCATTTTTCAGTATTCTGCTCAGCCTCGAA  
CCGGCATTCGCCGCCGCGCTCGGCTGGATCCTGCTTGATCAAACCCCCACCGCGCTCAAG  
TGGGCCGCGATCATCCTTGTCATCGCGGCCAGCATCGGCGTCACGTGGGAGCCTAAAAAG  
ATGCTTGTCGACGCGCCCTCCACTCAAATGCAACGCGAAGAGGCGAGTACACACACCT  
AGT

>RXA00490-downstream  
TAACGTGCAGGCTTACCTTTTGG

>RXA00491-upstream  
TCCTCATAGTGTGTCCACAATTATCTAAACTTTAGTAGCTTGTCTTAAATCGGATAACC  
GCTGCAGCTCACACGCTATTCCACAACCGGAAATCTGGCA

>RXA00491  
GTGTATTGGGTTTTAGCAACCTCTGCCAATAGGGTGGAAGATGTGAACTTTGATGCGATG  
ATGCCCCGCGACCCGTTTGCCGATGATCCCAATGACCCGGCATCGTTTATTACCGACGAT  
GACCCTTATGATCATCCCGAACCGCTTTCTGAAGAAGAGCGAATCCACGTGAGCCAAGAC  
CTTCGCCTCGTGATGGAATTTAAAAAAGTTTTAGGTCCCCGAGGAATCGAAGGCGTGTTT  
TTCATGTGCGAAGACTGCGAAGAGTTCCACTACTACGACTGGGACATCATGGCAGCAAAC  
ATGCGCGCCACCTTGCTGGGGAACCTCAGCCCCGTGCATGAACCAAGTGCGCAACCCAAT  
ATTGATGCCTATGTGCCGTGGGACTACTGCATTGGTTACCTAGACGGACTTGAAGCCAAA

>RXA00491-downstream  
TAAAAACTGCTAGCAACTAAAGA

>RXA00493  
TTGGAAGGCGACAGAAAGTTCGGCGTTTCGCGCACTGGCTACTGCTTTGGGCAAGCCAGCG  
TACTGGATCGCCTCCAACGCAGGTCTTGACGGCTCTGTTGTTGTTGCACGCACTGCTGCT  
CTGCCAAACGGCGAGGGCTTCAACGCTGCAACTTTGGAATACGGAAACCTGATCAACGAC

GGTGTTCATCGACCCAGTCAAGGTCACCCATTCCGCGAGTAGTGAATGCAACCTCTGTTGCA  
CGCATGGTTCTGACCACTGAGGCTTCTGTTGTTGAGAAGCCTGCAGAAGAAGCAGCCGAT  
GCACATGCAGGACATCATCACAC

>RXA00493-downstream  
TAAAGTTCTGTGAAAAACACCGT

>RXA00496-upstream  
CTGCAGAGATGGTGGGCAGCACCCCAGGTGCTGTACGAGTTGCCCAACACAGGGCACTCA  
CGACACTTCGAAGCACACTTGAGCAGCAGGAGAACAAGTA

>RXA00496  
ATGACTCGACGTCTACATGGTGGTGAGCAGGATGGCCAGGAACACGTTAAAGGACAGCTA  
AAGCAGCTGTTTCGACGACGACGCGTTCTTGACTGACCTGTCCCGCGGCGTTGATCCCTCA  
GAGGGCGATGACGCCCTCGCTGGCCTCCTCCTCGATTTAACAAAGGAAGCTCAGGAGCCG  
CCGGCAACAATGCCGATTGGTCTACTTTGCTCCCTGGAATTTTGGATCAGGATCAGGAT  
TTGCCAGTGGAATCCACTTCGGACACCACGGTTATGCAGGCATCAAACCTGCAACCCAA  
GAATTCGCACCTGTTTCTATTCTGATACCCCAACACTGCAACTAATTCAGCTGATGCA  
GATGAGTCCGCAACTGTTGTTCCACTTGCAGCACGCCGTGAG

>RXA00504-upstream  
AAGGTGGATTTGAAGCGAATTGTCTAGCTCTGCATGAATTCCGTATGAATTCTTTCTTT  
CAAGTGGCCGAGATGTGAAGCGCACGGTTAATTGAGAGGC

>RXA00504  
ATGACCTACGGATTTCTTGTC AACACAGATCTCACCCACCGCGCGATTGACTTTGATTTA  
GAAAACGCTGCGAAGTTCTTCGGCGGTGCCGATGATGGCCGCGCTCGCTGTCGCTTTCCAA  
GAGGATGGCACCTTGACGCCGCTCTCTACAGCGCCAGCGCAAAAGATGAGGGTGCCGCA  
GCAAACCCAGTAGCATCCCTTGCGCCGAACGCCGCTGCTACCGGTGATGGCTCCTTCTTC  
TCTGAT

>RXA00505  
GATCTGATCCACATGGATGCCTACCGATTGCTGGGCGAAGACAGCGAGGATGCTGATCCG  
ATCGGTGCGCTGGACTCTTTGGATTGGATACCGATTTGGACTTGGCTGTGGTTGTGCG  
GAATGGGGCGGTGGCTTGGTGGAGCAGATCGCTGACTCGTATCTTTTGATTACCATTGAT  
CGAGAGACCGCTGTGCAGGAAGACCCGGAATCTGAGGCTCGAATTTCCATTGGGAATGG  
CGCGAAGGCCGC

>RXA00505-downstream  
TGAGAAAGTTTTCCACGCTAAAA

>RXA00506-upstream  
GTTGGATCTTGCAATTGAAAAATGAAAACCTCGTCGGGAATGCAACTTGGGATCACGTCT  
CGGGCAAGAAACGTCCTTAAAAAAGGGGAGTGATTGTGA

>RXA00506  
GTGCTTGATTTCTTAGCTGCGAACCCGCTGATTGCGCTGGTGGTTATTTGGCCGTTGGT  
TTAGCAATTGGTCAGATTAGGGTCTTTGGCCTTTCTTTAGGTGCCGCCGCGGTGCTGTTT  
GTGGCCCTGGTGGTTTCAACTGCAAATACCGACATCGTCATCCCATGATTGTTTATCAG  
CTGGGCTTGGCGATGTTCTGTTTATGTCATCGGTTTGTCGCCCGGACCAGCATTTTTCAGT  
GAGTTCGCTAAAAAGGGCTGGAAGCTCACCATCTTTATGCTCCTGCTGCTGGCAACACTG  
ATTGGTTTGGCGTGGGTGCTTATTAAGTCACTGGGGCTTGATGCAGCGATCGGTACCGGT  
ATGTTACCCGCGCGCTGACCTCGACTCCCGGTATGGCAGCGGTGCTGGAATTGATTGAA  
GGAATCGATCCAAGCCTTGCCAGTGAACCTGTTATTGGTTATTCCTTGGCATATCCGGGA  
GCCGTGCTGGGATCCATTGTTGGTGGCCGCGGTTGGAGCGAAACTGCTCAAAGTAAATCAC  
CGGGAAGATGCTCGAAAAGAAGGCATGATACCGCACCGCTGGTGTGGAAGGGTGTGCAG  
CTCAAACCTGGAATCACAGGCAGGGTGGGAGATCTTCCACGCCTTGCAGGTGAAAGTATC

ATCGCAACCCGCATTGTGGATGATCCACATACACACCGCCTCGCGGATCCAGATCTGCCG  
ATTACTGAAGGCATGGAACCTGTTGATCAACGGCACCTGAAGAAGCCGTGGATCGGGCAATT  
AAGGCGTTGGGTGAAGAACGCGAAACCAAAATTGAGGACACAGAGCTGATCTACACCCGC  
CTGACGGTATCTAGCCCTGAGGTTGCACCTGAGACCGTTGCTGAGCTTGATACTGATGCT  
CACGGATTATGATTGCCCGTATCCGCCAGGGCGATTCTGAGGTAGTGCCCTAAACCTGAC  
ACCGTGATCAACTACTCTGACCGCATCCGCGTGGTGGTTGCTCCTGGTCGTGTGGCTGAA  
GTGCGACGATTCTTAGGGGACTCTGAAAAGTCCCTTGCTGATGTTAATCTGCTGCCTTTA  
GCCATCGGATTATCTCTTGGCCTGTTGTTGGGCGCGATCCCGATTCTCTTCCAGGCGGC  
ACCACGATGTCCCTTGGCTTTGGTGGCGGCCCGATTATTGCCGGCCTGATTTTGGGAGCA  
CTCAAGCACACAGGACCGCTGACGTGGCAGATGCCGTTCCACGCCAACCGCACGATCTCC  
ACCTTGGGCTGGCGCTGTTTTGGCTGGTGTGGGTACCTCTGCAGGTGCAGGATTTAGA  
GCTGCGCTTACCGATTCTCTC

>RXA00507-upstream

GTTCATGTTGAACCTATTGTGCCACCAACCGCGGACAGAAATACGATTGGTGCCGGGGTTA  
GTGCCAGTATTGCCCCACGCTTTCAACTATCCTTAAACAC

>RXA00507

GTGGCTGAGAACTCTGAACAAACACCTGTCCAAACTGTCCAAGCGCGGACCGCACCGCGTG  
CTGGTAGGCGATATGAACCTACGCCGGCATCCCGGGCAAATCTACACCCAGCAGAAGGC  
GACGGCATCCCAGGTGTAGCTTTTCGGCCACGACTGGATGAAATCCATCAAGTACTACCAC  
CAAACCTTTGCGACACCTCGCGTCTTGGGGCATCGCTGTTGCCGCCCCAGACACCGAAAAT  
GGCTTCATGCCAGACCACAAAGGTTTCGCCTCTGACCTCGAATCCTCCATTCAGATTCTC  
GGCGGCGTAAAACTCGGCTCCGGAAACGTCACCGTCAACCCAGCCTGCCTCGGTGTAGTA  
GGCCACGGCATGGGTGCTGGGGCTGCAGTACTATCCGCAGCAAACCGCGACCTCGTGCGC  
GCAGTCGGAGCAATCTACCCAGCGAAAACCTCCCCCTCAGCAATCGACGCCGCCCTTCGCT  
GTCAAAGCCCCAGGCCTAGTCATCGGATCCTCCAGCCTCGGCCTCTTTGAATCCGGCGAG  
CCAGCAAAACTCGCAGCCAACTGGGCGCGGATGTCTGCTACCGCGAATCAGAAAAAGGC  
AACCAACAGGGCTTCTCTGAAGACACCATGTTCAAACCTTGTCGCAGGAATCGGCAGCCCA  
CAAACCGGAGCTCAAGAAACCGTCCGCGGCCTCTCACCAGGATTCTTCTCCACCAACTT  
GCCGGAGAAAAGAAATACAAAGCATTCTCCGAACCAGACGCTGAAGCTAAGAAAGTTGTC  
TCCTACTTCGGCCAGGAGCTGCAGGAACATGCCTTCCCTAAGGACACGTCCCCATTTCGC  
TTCCTTAACGAGAAG

>RXA00507-downstream

TAGTTCGCTTTTCTTAGTGGGTG

RXA00509-upstream

CTTTTCTGGCGTCTTTTCAACCGGCTTCTCCACTGGTTTCTCGTCAGGTTTCTCAACGGC  
AGCAGGTGTGGTCTTTTCTTTTCAACACTGGATTTCAGCA

>RXA00509

TTGGTCGACGTGGAACCTATCCGCAGCACTGCTCGATCCGCCAGAACTCCCAGAGCTAGCA  
GTGCTCGAGCTTGAACACCTGAAGAGGCCGCGAGCCGAAGAAGTCGCTCCACCAGATGAA  
CCCCAGAAGCTGCACTACACAACGGCTTTGGCTCAGTTTCAAACTTGTTTTTCCA

>RXA00509-downstream

TGATCGGTCAACGCGGAGAAACA

>RXA00510-upstream

GAGCAGTGCTGCGGATAGTTTCGACGTCGACCAATGCTGAATCCAGTGTTGAAAAGGAAAA  
GACCACACCTGCTGCCGTTGAGAAACCTGACGAGAAACCA

>RXA00510

GTGGAGAAGCCGGTTGAAAAGACGCCAGAAAAGCCGGTAGAAAAACCTGTCGAGAAGCAA  
GAGTGTGAAGAAAAGCCTGACCCTGACCCGGAAAnAATGCAAAAnCAnGAGCCGGTCGAG  
TGTGAGCCAACACCGAAACCTGAAACAGAGCCTGAACCAAAACnGACACCCACGCCCCAn  
CnACCCGGAACACCAACACCAATACCTGnAGCTAGAGnACTGAGGATTGnTGnAnACnCT

GnGCAAGGAGAnCGnGGCACAGACTCAGnnAnATnCTnnnnnnnnnGAATCGGAAGAGTGC  
 GCCCCCGAGCTCAATGACGTTCCAGAAGAGTCGGATCTGATTGGGCAACTCATCAAGGGA  
 GCAATCGGTATTGGGATTGTTGTTGTAGGCGTTGGGCTGTTGGTGAATTTCTTGGAGCAG  
 TGGCTCCCTGTGATTGAAGAAGTACCTGTGCCGGAGCCCGAGCCTATACCTGAACCCGCT  
 CCGCAGCCTGAGCCAACTTCAGTGAAACCACCAGAGTCTGAAGTAGATAAG

>RXA00515

ATTGAAAGCTACATCGCCCCAAGATGACAACGCCCAACTGCTGCTGAACTGCAAGTACGC  
 CTCGATGCCATCGAATCCGGCGAAGGCCTAGCCATGCTCCTCCCAGACGATCCCACGCTG  
 GCAGACCCCCAACGCCGAGGAAAGTTTCAAAACGGAGTACACATACGACGAAGCCAAAGAC  
 ATCATCAGCGGATTCTCCAGCGATCCAGCCAGCGATGTACTCAGCCAACTTCAACAAGCC  
 GCCACCACCGGCACCCGCACCCGAGAAATCCGCGCCGAAGTATTCGCCGACCCGACCCGAT  
 GATTACAACGAATCCCAAACCGCTCTTAAAGAGGATTTCAAAACCTGCATCGATGCCATC  
 GATGACGCCCCGCCAATCCCACTGCAGTACATCCTGATTGGAGGCGCCATCGCTTTGGCG  
 GTCATCGTCTCGGGATCAGGGCGTGACTAACTCAAGGAAGCAGTCCAAGCACAGCCAG

>RXA00515-downstream

TAATACGCCAAGCAAAAAATTGC

>RXA00519

ATGGCTGGCGGGGACTGTTTCGAGACCGGTGCTGGTGGATCTGCTCCTAAGCACGTCCAG  
 CAGGTTTCAGGAAGAAAACCACTGCGTTGGGATTCCCTCGGTGAGTTCTTCGCACTGGCT  
 GAGTCCTTCCGCCACGAGCTCAACAACAACGGCAACACCAAGGCCGGCGTTCTGGCTGAC  
 GCTCTGGACAAGGCAACTGAGAAGCTGCTGAACGAAGAGAAGTCCCCATCCCGCAAGGTT  
 GGGGAGATCGACAACCGTGGCTCCCACTTCTGGCTGACCAAGTTCTGGGCTGACGAGCTC  
 GCTGCTCAGACCGAGGACGCAGATCTGGCTGCTACCTTCGCACCAAGTTCGAGGAGCACTG  
 AACACAGGCGCTGCAGACATCGATGCTGCACTGCTCGCAGTTTCAGGGTGGAGCAACTGAC  
 CTTGGTGGCTACTACTCCCCCTAACGAGGAGAAGCTCACCAACATCATGCGCCAGTCGCA  
 CAGTTCAACGAGATCGTTGACGCACTGAAGAAG

>RXA00519-downstream

TAAAGTCTCTTCACAAAAAGCGC

>RXA00520-upstream

GTTGACGCACTGAAGAAGTAAAGTCTCTTCACAAAAAGCGCTGTGCTTCCTCACATGGAA  
 GCACAGCGCTTTTTTCATATTTTATTGCCATAATGGGCAC

>RXA00520

ATGCGTTTTTCTCGAGTTCTTCCCGCACTTCTTATCACCACCGCCGTGAGCATCCCAACA  
 GCATCTGCTGCCACACTCACCGGCGACACCGACAAGGAATTGTGCATCGCCAGCAACACC  
 GACGATTCCGCGGTGGTTACCTTCTGGAAGTCCATTGAAGACTCCGTGCGCGAACAACGC  
 CTCGACGAAGTAGACGCC

>RXA00527-upstream

TTCTTGGCCCCGAAGAAATTAATCATTGTGGCCGTGGTCCTGATTTTGATCATTGCGGC  
 TGCCCTCGTTTTATTTCTGCGTTCATCATCGAATGACCAG

>RXA00527

GTGATTGCCACTTCTGATGTTCCGGGAGATTTCTCCTCCGAGGGAATCGTGGCGCGTGTGTCT  
 GTCAACGGAAATATTGAAGCTGCGCGAACCACCACTTTACACCAAGTCTGACTGTGCCG  
 GTCGCGAAGTTGCCGGTTGCGGTTGGTGACCGTGTGGCAGCTGATCAGGTGTTGGCTGAG  
 TTGGATGCCTCTGCCCTGCAACGACAGTTGGATGAAACTGATGCCAACAATGCGCGTGCA  
 GCCATGGCGAACCGBAATTCCATCGCGCAGTGCAGCAAGCATATGAGCAGTCCAGGGAA  
 CTTCTTGATAGTGGTTTGAGCCCGGAGATCAACTCGGCGCGGTCTCGTTGCGGGCGTCC  
 CTCACAGGCATATCAGGATGCGATCCGCAAGTTTGAAGCGAAGCAGCGAGATGTGGATGGC  
 GGATTGGATTCCACCATGGTCGCTCAATCGGATGCTCTCAAGGCAGCTCGTGAGCAAGCA  
 GATGCTGCTGAAATTGAACGACTGCGCGCGGACTTCGGACTGCTCAACAACGATCGCAGC



AACCTCAACGATGTCATTGGTCTGCTCGATGAGAGAGAATCTTTGGCTTCTGCGGAATCC  
GAACTAGCTCAAGCCCGCGCTGCAGGTGACCTAGAGGCAGTCGCTGCAGCTGAAGCAAAG  
GTTGCAGGCCTGGAACAATCAATTGCTTCCAAAACCTCCACGTGGCCTAGCCAAGATCAG  
ACTTACTTTGCAGTCTTACACCGCTTTTGGAGGAAGCTGAGCGACGCGTTCGCATCCACCAC  
GAAGCTCTAGAAATAGCCGAGCGGATCTACATTGATTCACTCGGAAAAGTTGACTCAGAA  
CTAGCCGCGCAGCGAGCGCCGTTGCCGAAGCCCACTCAGCACAACAAGACGAGCAGCATTT  
GGCCTCGAGAGACCGCGCAGCTTTCCACCCAACACCAATTGGAAGCCCAATCAAGCGCCATC  
GATGCAGCTTTAGGTTTGGCATCAGTAGATAATGAAGCCGCCACCAGATCCACGTCCCAG  
CTGCGGATGGATATCAACAACACCACCGTTCGCTCCCCATACTCAGGCATTGTTTCATCC  
GTGCAGGCAGCCCAAGGTCAACCAGCAGCCGGCGCACTGTTGAGTGTTGCTGATGATTCC  
GAAC'TGAAGATCACCGCGAATGTAAAAGAAGCGGAGATCAGCAACGTCACCATCGGATCC  
CGCGTCACTTCACTACCCCATCGACCCGGAACCAAGAATTCGCGCGGCCGAGTATCCAAA  
GTCTCCCCCATTTGACGTGCGCCAGTGCCTCCAGTACAGGTGAAGGAGCTGCCGAGGC  
GCCACAACCACCAACACTGACGCTACCTTCCCCATCGAAATTTCCGTCACCGCGCAGCCG  
GAAGGCCTCAACCTCGGCGGATCCGCTCGAGTACGCATCGTCCATGAAATCGCACCACAC  
GTACTGACCGTTTCTTTTGAAGCTGTGTACAAAAATGATGACGGCAAAGACGCTGTTTTG  
ATCATCAGCGACGACAACAAAGTAGAAGAAGTAGAAGTAAAAACAGCTGAATCCGATGAC  
TTTGATATCGCAGTCAGCGGTGCTGGAATTTTCAAGAGACGCTCGAGTGCTCACCCAGCCT  
GGAAACTACCGGGGCTCATCGGAGAAACTGTGAAACTTCACGCAGATACGGTGGAGCAG  
CGCGCGGCTCTCTTTTACTCTGCGGCCCCCTTTTGACCTGACGCCCTGCGGTTTCTGCC  
AAGCAAACCGTGGGCCAGTGATT

>RXA00527-downstream  
TAGCCTATGAGCCTCATCGAAAT

```
>RXA00528-upstream
TTCTGCTGGGAATCCCCACATTTTGGAACTAGCGTCGATAAGCGTGC GGCGAAGCTTTT
TCGGTCGCGGCCGTATCTTTTTTAAGAGGAGAAAATTTTAG
```

>RXA00528  
ATGAGCACGTCCACCATCAGGGTTGCCATTGCCGGAGTCGGAACTGCGCGACCTCCCTC  
ATTACAGGGTGTGGAATATTACCGAAATGCGGATCCTTCCGAAACTGTCCCGGGTTTGATG  
CACGTCAAATTCGGTGATTACCACGTTGGCGACATTGAATTCGTGGCCGCGTTCGACGT  
GACGCCGAAAAAGTAGGCATCGATCTTGCCGACGCCACCGAGGCTTCAAAAACTGCAC  
ATCAAAATCGCCGATGTCCACAGACCGGCATCAACGTGCTGCGTGGCCCGACTCTCGAC  
GGCCTGGGCGATCATTACCGCGCGACCATCGACGAGTCCACCGCCGAGCCAGTCGACGTT  
GTCCAGGCGCTTATCGACGCAAAAAGCCGATGTTTTGGTGTCTTACCTCCCAGTGGGCTCC  
GAAGAAGCCGACAAATTCCTACGCAAGAAGCCGCCATCGATGTCAGGCTGCGCCTTGTCTAAC  
GCTCTCCAGTATTTCATCGCCTCCGACCCTGAGTGGGCTAAGAAGTTCACTGACGCTGGC  
ATCCCAATTGTTGGCGATGACATCAAATCCAGATCGGTGCAACCATCACCCACCGTGT  
CTCGCACGCCTTTTTGAAGAACGTGGCGTTTCGCGTAGATCGCACCATGCAGCTCAACGTC  
GGCGGCAACATGGACTTCAAAAACATGCTTGACCGCAATCGCTTGAATCCAAGAAGGT  
TCCAAAACCCAAGCAGTGACCTCCAACATTCCAGATGGTCCACTGTCTGGAAAGGTGGA  
GACCGCAACGTCCACATCGGACCATCCGACCACGTCCAATGGCTCGATGACCGCAAGTGG  
GCTTATGTCCGCTCGAAGGCACCGCATTCGGTGGAGTTCCTCCCTCAACCTTGAGTACAAA  
CTCGAGGTGTGGGATTACCCAACTCTGCCGGCATCATCATCGACGCTGTTTCGCGCCGCC  
AAGATCGCCCTCGATCGCGGTATCGGCGGACCGATCATGCCAGCAAGCTCCTACCTGATG  
AAGTCCCAACCTGAGCAGCTTCCAGACGATGTTGCTTGTGAACGCCTAGAGGCATTTCATC  
ATCGAGGCG

```
>RXA00528-downstream.
TAAAATTAGGCTAAAAATTTGGG
```

```
>RXA00529-upstream
GCAAAGCTTTGTACCGGAAGCGTTAAGGCACTGGATTTTGTGCGAGCAGTTTCAGGCTGTT
TAGCGGGCGAGTTCTTATAGAGATGTATAAGGTGAAGCTC
```

>RXA00529  
ATGAAGTTGAAGTGGATTGCACCAATTCTTCCGGTTTTGGCCCTTGCAGGCTGCGGAAAC

TACGTCAACGTAGAGTCGCAAGGGAAATCTGGAATTTCCCATGATGAGGACGGAAATATA  
AGCGTTTACATGTACATCTGTGGTGATAATGCGGTGGATGAACTGATACTTAGCGGTGGT  
TTTTACGATGGCCACCTGGGACAAACAACCCAGCCCTGGGATGTTGAAAACCTTCCAAC  
CCTGAGTCGGGTATGTTGTAGTCAACATCGCTGATCCAGCACCGTGGGAAGTTGTTGAG  
CCAATCAATTTGCCCACGGAACAGGGAAAAGTACATTATTGCCAATCCGAGGTTGGTAGAT  
AAAGGTTGGCCGATTCTTTTCGCAAAAGAAAAGTATATGCCGAGTGTTCACATCAGTA  
GGAATGCTTGAAGGAATAGATCCAGGTCTAGTCATGCGGGATATGTATACCGAGTCGACT  
CATGTGTTCCGTTACTGCCGAAGACTTTGTTGAAGCCGGTCAACAGTGGTGCGAGGATTAT  
TTC

>RXA00529-downstream  
TAAAACGTGAATCTGGCAAAAGA

>RXA00530-upstream  
GGCGATAAGCCTCCTCCCTGGGGCCTTGCCCATTTTCATAGGGTGTCCAGGTAATGTTTCA  
GGGGTTAGATTTTACGCTGAAGCAACTGGGGAGTTGGCGCT

>RXA00530  
ATGAGCATCGGATTTCGACCGCGACCTTTATATTAAGATGCAGTCGCAGCACATCAATGAG  
CGCCGCGAGCAGATCGGCGGCAAGCTGTATCTGGAATGGGCGGCAAGCTTTTCGACGAC  
ATGCACGCTTCCCGTGTGCTGCCAGGTTTCACGCCTGACAACAAGATCGCTATGCTCACT  
GAGCTTAAAGATGAGCTGGAATCCTCGTCGCAATCAATGCGAAGGATCTGGAGCGCAAG  
AAAACCCGCGCCGACCTCGACATTTCTTATGAGGAAGATGTTTTACGCCTCATTTGATGTG  
TTCCGTGAGCTGGGCTTTTGGCGGAGCATGTGGTGCTCACACAGTTGGAGGATGACAAC  
TATCAGGCACTCGCGTTCAAGCAGCGCCTAGAGCGCCTTGGCCTGAAGGTTGCTGTTCAC  
CGCGTGATTCCAGGTTACCCAATGATGCTCGCCGCATTGTTAGCGAGGAAGGTTTCGGC  
ATCAACGAGTATGTGGAAACCACCCGCAATTTGGTTGTTGTGACCGCACCGGGCCAGGT  
TCTGGAAGCTCGCTACCTGCTTGAGCCAGATTTATGGCGATCACACGCGGGAATCAAG  
TCCGGCTACGCAAAGTTTGAAACTTTCCCCATTTGGAACCTGCCTCTTGAGCACCCAGTT  
AACTTGGCTTATGAGGCTGCCACGGCAGATCTCGATGACATCAACATCATCGATCCTTTC  
CACCTCGCCCGCTATGACACCAAAGCCACGACTACAACCGCGACGTGGAAGTCTTCCCG  
CTGCTGAAAACCATGCTGGAAATGCTGTGCGGGCTCATCGCCGTACAAATCCCCACCGAC  
ATGGGTGTCAACATGGTCGGAAGCGCAATTATCGACGACGCCGCGTGCCAGGAAGCCGCC  
CGCCAAGAAATTGTTCCGGCTTACTTCAAGGCGCTTGTGACGAGCGTCGCGAGGAGCAG  
GACGATACCATTTCAGCGCGCATCGCCATTGTCTATGAGCAAGGCCGTTGCACCGTTGAA  
GACCGCCGCGTGGTTGCCCCGAGCACTTGATGTTGAAGAATCCACCGCGCGCCGGGTTGT  
GCCATTGAACTTAACGATGGTCGACTCGTCACCGGAAGACTTCAGAACTTCTCGGATGC  
TCCGCAGCGATGGTGCTTAATGCACTGAAGGAATCGCTGGCATTGATCGCAGCGTGGAT  
CTCCTCTCCCTGAATCCATCGAGCCAATCCAATCGCTGAAGACCCAGCACCTGGGATCC  
CGCAACCCCTCGCCTGCACAC

>RXA00530-downstream  
TGATGAAGTGCTTATTGCTTTGT

>RXA00535-upstream  
AATCGCATGGGGCACCGTGGTCAGACACCGGATCGCGCTCCGCACCCCAAAGATGGCTC  
CCTAAGGAGCTCACCTTTACTCAATGCTCTGATGACACCG

>RXA00535  
ATGTGGTGGGCAGGCATGAGTACCGCGATGCTGGCATATTTCTTACAAACAGTAGCACTT  
GGTTTCGGCACCCCTCTTGGTAGTGCAACAGTGCTTGTCTGTGCTGATGTTACGCTG  
CCGCTCTCAGCACGATTCAATGGCTACCGACTACGCCGAAGTAAATCTTCTGGGCTACC  
CTCCTCACCGTAGCCGTGGGCATCATGATCGTTTTGGGACGCCCCCTTCCCGGAAACCCC  
CACCCCCCACTCGATCGATGGATTCCAGTACTTTTAGTCGGCGTTGCAGTAATGGGTGGA  
ATGTGGTGCTTGCAGGAATACGTATTAAAGAAGGACAAAGCCCTCATCCTTGGTCTTGTG  
ACGGGTGCATTGTTGGCTACGTAGCAGTGAATGCCAAAGCCGCGGTGGATCTTTTGTG  
CATCAAGGCATAACGGGACTCATCTTGAAGTGGGAAGGCTACGGCCTAATCCTCACCGCA  
TTACTTGGAAACAATCGTGACGAGTATTCCTTTAACGCTGGCGAACTACAAAAATCGCTA  
CCCGCCATGACCATTGCCGAACCAATTGTTGCCTTCAGTTTGGGCTACTTGGTTCTGGGC

GAAAAATTCCAAGTCGTGGACTGGGAATGGATCGCCATGGGCATCGCACTACTGGTGATG  
ATTGTTTCCACCATTGCACTGTCTCGTACAAGCACAATGCCGGCCGGATCGAAAAGG

>RXA00535-downstream  
TAAAACTCCAAAGTTCCCCCGA

>RXA00540-upstream  
TCTCCCTATCTAAGGGCTGGCTAGGTTTGACCAGTGGCAACAGTTACACTTGTGCTCGTA  
AAACATTGTCTCTCCCATTTCTTGAGTAAGGAAAATACC

>RXA00540  
GTGGCCCGTGTAGTTGTCAATGTCATGCCTAAGGCTGAGATTCTGGATCCCCAGGGGCAG  
GCGGTACACCGCGCCCTCGGACGTATCGGAGTTTCTGGCGTTTCCGATGTCCGTCAGGGA  
AAGCGCTTCGAGCTTGAGGTAGATGATTCGTCACCGAAGCTGACCTAAAGAAAATTGCT  
GAAACCCCTCCTCGCAAACACCGTCATCGAAGACTTCGATGTGGTGGGAGTTGAGGTCGCG  
AAG

>RXA00540-downstream  
TGAGCGCCAAAATCGGTGTCATT

>RXA00546  
CCGGTGTGGGCGGAATTTTCCAGTGGATTGTGGCATTATCACGCGGTTTTTGTACCCG  
GTTGTTGATGTCATTCCGTTTCATACGCTGCCGTAATCTGGTCTTTATTTTCATCGTCACC  
GCGCTTGCCTTGGCGTTCTTTTGGGTGTTGGTCATCCGCATGATGGTGGAGCTCACTGGC  
AATCGAGTGTGGGATAACCGTCCTTGTTCGCGCGTCTCCCTGGTTGCTGTGCATGCGTTT  
ACCAACTGGGATACTCCAGCCATTGCGGCGGTGATTGGTGCATGCTTGCCTGAAACGC  
GGAAACCCCTTGGTTGCGGGTGTGCTGATCGGCGCGGGTACGGCGTTCAAATTGTGGCCG  
CTTTATCTTCTTGGTGCGTATTTGGTGCTGGCGGTCAAGAATAAGAATCTCAAGCCGTTT  
ATCACCATTGGCTGCAGCGGCTGCGGTGACATGGCTCGTGGTGAATGTGCCAGTGATGATC  
GCGTACCCCAAGGCGTGGAATGAATTCCTTGCCTGAACCGGAGCGTGGTGCAGAGTGG  
ACCACGATTTACCAGGTCATCGACCGTAATTTGCCGATCAATTTGAATGATCCAGTGCTG  
CTTAATGTGCTGAGCTTCGGCTTGTGTTGGTGTCATCAGTGTGTGGCCATTTTGATCCTTGG  
GCTCAAGGTGCAGCGCACTCCCCGAGTCGC

>RXA00546-downstream  
TGAGCTGGCCTTTTGTATTGTCG

>RXA00547-upstream  
ACCACGATTTACCAGGTCATCGACCGTAATTTGCCGATCAATTTGAATGATCCAGTGCTG  
CTTAATGTGCTGAGCTTCGGCTTGTGTTGGTGTCATCAGTGT

>RXA00547  
GTGGCCATTTTGATCCTTGGGCTCAAGGTGCAGCGCACTCCCCGAGTCGCTGAGCTGGCC  
TTTTTGATTGTGCGGCGGTTTTTGCTGTTTAAACAAGGTGTGGAGTCCCTCAGTATTCAGTG  
TGGCTGGTCCCGTTGGCTGTTCTGGCATTTCCTCAGTGGAAGTGCTGTTCCCGTGGATG  
GTTACAGACGCCATGGTGTGGCCAATTTTGATGTGGCACATGCTCGGCACGGACAACAAG  
GGACTCCCCCATGAAATGTTGGATCTCATCGTGATTTCCTGAGATGCCCTTCATTGTGGTC  
ATGATAAGTAGGTGTAATCCGGCAGATGCTCGGACGACGTGCAAATCCGGTGATGGATGC  
GCACGCCGGGCGGAATTGTTGGCCGGGCCCTTCGGCGCAAGCGAAGCGTCGAA

>RXA00549-upstream  
ATTCGTTTGCAGCAGGATCTGGAATGGTTTACAGGATACTGCGGACATGGCGCATGCT  
TTGGGTATCGCGAAGTCTTTGCCAACTATCCCTGAGACAC

>RXA00549  
TTGACTGAAAACGGAGAGACCCCTTATGAGGGCATCATCTTGGGTGAGTATGAGTCCCGC  
CCACTTGATATGGCTTCTGCGATGGCAACTATCGCTAATGAAGGTGTCTGGCACCGCCCCG  
CACTTCGTGTCCAAGGTGGAGACTGTCAGCGGTGAGGTTCTCTACGAGTTCGAGGATGGC

GACGGCGAGCGTCGTGTTTCTGAAAAGGTTGCACTGAATCTGCTCAAGGCCATGGGGCCA  
ATCGCTGCATACTCCAACGGAAACGCTCTGGCTGATGGCCAGGTTTCTGCATCCAAGACT  
GGTACCACTCAGCTTGGTGATACCGGTGCAAACAAGGATGCGTGATGTTGGGTGCGGCA  
CCTCAGCTAGCTACTGCGGTGTGGGTGCGAACTGCT

>RXA00549-downstream  
TGATAACACTGCATTGTATAACA

>RXA00550-upstream  
AAGGATGCGTGATGTTGGGTGCGGCACCTCAGCTAGCTACTGCGGTGTGGGTGCGAACT  
GCTTGATAACACTGCATTGTATAACACCTGGGGTGGCAGT

>RXA00550  
ATGTATGGTTCTAACTCCCCCTGCCACGATCTGGAAGCAGACCATGGATAACGCCCTCGAG  
AACTCCCCCTCTCGAAACTTGGGATATCGCTCCAGCATTGGGGTACGGTAACCCACCAGTT  
CCGGAATATGTGTGGACTCCAAGTCCAAACATCGCGACTAATGATCCAGAAGGAGCAACC  
GAGGAAGCTCCAGTGGAGGATCCAAATGCAGTAATCGATACCCCTGCTGTAGATCCCCT  
GCACCTGCAGAGGAGACCGGTACCGGTACGGTAGAAATCCTGCCGGGGCTGACTATCCCG  
GGAGATCTCTTAGGGATCGGC

>RXA00550-downstream  
TAAAATCCGGTCGTAGCCTAAAC

>RXA00552  
TTTAAGTGGTCCGAGGGTGGCGCTGAGGATTTCCCAAAGCTCAGTGTCAAAGTCCGCGAT  
GAGATCGTTGCCTTCGGCGCTCCAGATGAGCTCAAAGTGGATGAAAACGGCGTCGTCCGT  
GGCGGCGTTACCTGAAACCACAGCAGGTCAATGAGCTTGTGGAAGCCCGTGGCGATGAA  
GTTGTGTTCTTTGACGGCCGCAACGCAATGGAAGCCCAGATCGGCAAGTTCAAGGACGCT  
GTTGTCCCTGACGTAGAAACCACTCATGATTTTCATCGCAGAAATTGAGTCTGGAAAATAC  
GACGATCTCAAAGACAAGCCTGTGGTCACCTACTGCACCGGCGGAATTCGTTGTGAGATC  
CTGAGTTCACTCATGATCAACCGTGGTTTCAAAGAGGTCTACCAAATCGATGGCGGCATC  
GTTTCGCTACGGCGAGCAGTTTGGCAACAAGGGCCTGTGGGAAGGCTCCCTCTACGTTTTC  
GATAAGCGCATGCATATGGAAATTCGGCGAGGATTACAAAGAGGTCCGACACTGCATCCAT  
TGCGATACTCCCAACAACAATTTGAGCACTGCCTCAACGAAGATGATTGCCGCGAGCTC  
GTGTTGATGTGCCCTGATTGCTTCGCCAATGTTGAGACCCGTCATTGCAAGCGCGAACGC  
TGTGCAGCAATTGCTGCGGATTTTCGCTGAGCAAGGAATTGATCCGCTCGTTACTTCT

>RXA00552-downstream  
TAAAAGGGTATGGTGGCTGGGT

>RXA00553-upstream  
GTCATTGCAAGCGCGAACGCTGTGCAGCAATTGCTGCGGATTTTCGCTGAGCAAGGAATTG  
ATCCGCTCGTTACTTCTTAAAAAGGGTATGGTGGCTGGGT

>RXA00553  
ATGAGCATCGTTAAGATCAACGCAATTTCCGTACCCGAAGGCGCTGGTGAAGAGCTTGAG  
AAGCGCTTCGAGCCCGCCAAAATGCCGTGGATTCCGCTCCGGGATTTGAGGGCTTTCAA  
CTGTTACGCCCTGTTCCGGTGAAGACCGCTACTTTGTAGTCACCCAGTGGGCTGATGAA  
GACAGCTATAACGCGTGGCGTGATGCCGAAAAGGCCAAGGGCGGTCATGGCCAGGGAGCC  
CACGGCTCAGATAAGAAGCCTGTGCTTCCGGCGCTTCCCTGCTGGAGTTCGAAGTAGTC  
CTAGGATCTACCGGCGCTAAG

>RXA00553-downstream  
TAGGGAAAGAGAAAAGTCGGAAC

>RXA00554-upstream  
ATCCGAAACTCTCCTGTACCGACCATCATTTATCCCGGTCTTTAGGCTCTCCAACAGCAG

AGGACTAGACTTAAGTATGCCTGCAAAGGAGGACAACCTTC

>RXA00554

ATGAACACCCAACCAGAGCATCCAGAAAAATGATCTAGTCGACGAAGCCGATTTTTCTAAC  
CGGCCAGGATCTACTCGGACGATCCTGATTCCTTGGCTGATGCGCCAGACCCAGCGCTG  
GAGCATGAGAAGAACAAGAAATCTTCACGCCAAGCACTCATTTATCTGTTGCAGGTCCA  
CTAGTTACATTCGTTTCTGCATACGTATTGGCCTGGGTGTCACGACTCCAGGGCGGTCCC  
ATCTGTGACGCCGGTGAGGCTGTGTGGATTTGTTCCCGTGCTGCAGAACTGTGGTGGCCA  
ATTACCCTAGCGTCATCGCATTTGGTGGCATGCTTGGATCTGCATGGATCCTCTATGAC  
AAATACCGAAATTACCTACGCTGGCGTCCCTTGGATGGGCGTGTTGTGGATTTGATTCCA  
TTCAGCATGCTGTGGGAACCTCGGTGCTCACCTTGTCATCTTGGGGCAC

>RXA00554-downstream

TAAAAACTTCACATAAATGACAA

>RXA00555

TCGGGTGGCAAACGTAGTGAACAAAATGATGCTGTTTTTGGAGTTCGCCGCATGGCTAGCT  
CGTACTTCAGACATCAATGTTTCGTGGAATCACAACTTTCATACGCCCTTGGCCGTCTTCC  
TCCATCAGTAAGCTCGGAGGAAAAATATCATAAGTGGTATAAGAATTTAGATTCTTACTAC  
CGCAGTCGCACGATCAAGGGACTCAAAGAGGGCCGGAGTTGAGAAGTCCCAATGGGACGAT  
GATGTTTCAGTTTTTGTAGATGGTCCTTCTGAATCCACGCTGCTCACCCATGCTGCTGAA  
GAATTCGAAGCGGACCTCATTCTGCTTGGCTCTGATGCGACCGCACCAAAAAGGCCGCTTT  
CTGGCCAGCTCCACCGCAGATGCCCTCCTTCACCTCCTCGCCCGTCCCACTAGGACTTGTG  
CCGCGAGGGGTGAAGCTTTCCAAAAGGGTGTACCCGCGTCAACTACGCTTTCACCAAT  
GAAAGCGATGACTTTGAGCAAGGTTTACGCTCTTCCGCGGAGCTCGCCACCAATTGGAAC  
GTTCTCTTTCGGATCCTTGCTTTTTTACCCACAGGCATTACTTCCGCACCAACGTCGCGG  
AGCTTGGATATTTCCACTGAGCTTTCCTCCGAGTGGCGTGAACCTAACGCTCGCCATGCTT  
GATCGAGCCCGTGATGGCGTCTTCACAGACCACCCAACTTGAGCGTGAGCAGTGAAACC  
GGTCTTGGCTGGGGTTGGAGCGGTGCAATTGATGCTTTGCGATGGAAGAAAGGTGACCTG  
CTGTGCTAGGGAAGCCATCGCACAGACACCCCTTTCACGTGCTTTGTGCGTTCGGAAACA  
ATGGAAATTATCCGAACTCTCCTGTACCGACCATCATTTATCCCGGTCTT

>RXA00555-downstream

TAGGCTCTCCAACAGCAGAGGAC

>RXA00560-upstream

AAGGACGACTTCTGCGGAGCGGTGTGGATTCTCACGGGATTCTCATGCGGATTATCAGA  
CATATGGACACTTTAACGGTTCGTACTAGGCTGATGCTTC

>RXA00560

ATGAGGATTGATCCGCTGGAAACCCGGCAAGCCGTATTGGCCGTCAAAGACTGGATTGAA  
GGGGAGGGAGACGTCAAAAAGCCTGGTTCGTGCGGCACCTGCCGCCGCAACTCGCCTGAGC  
GTCCGACTGCTCGCGCAACACGCGCCGGGAAACAGCGTGGAGGTGCGGGTACCCCCATTT  
GTTGCGGTGCAATGCATAGAGGGGCCAAAACATACACGCGGCACACCACCCAACGTG

>RXA00563

TTCTACAAGGATCTCTACGCACGTTCCGCACGCGGCACGGCAGCACTGTGGATCGTGGCG  
GCTAACTTGAGCTCCTACTCAGACATCGACGCCATCATCAACTGGGTTCGGATCCGAGCAG  
ACCACCACCGTCAACGGCGCATCCAAGCTGGTCAAGCCAGCTTTGGTCCCTACCTTGCTG  
TTCCCATTTCGCGGCACCTCGCGTGTCCGGATCCATGGCAGATGCAGGCCACAGGCAGAA  
TCCCAGATGCGACTTCTGCTCTGGTCTGTTGAGCGCCTCATCGCAGGTCTTGCGCCATTG  
GGCTCCTCCATCAACGTGGGTACCCGCTGCACGTGGTTCATCCCAGGTTACCAAACCGT  
GGACGCTTCGGTGGCGATGGTGCATACGGTGAATCCAAGGCAGCTCTCGACGCCGTGGTT  
ACCCGTTGGAACGCAGAGCAAGCTGCATGGGAGCACACCTCCCTCGTGCACGCTCAC  
ATCGGTTGGGTTTCGCGGCACCGGCTCATGGGCGGCAACGATCCTTTGGTCAAGGCAGCT  
GAAGAAGCAGGCGTGAAACCTACTCCACCCAAGAAATTGCAGAGAACTGCTGTCCAG  
GCAACTTCCACTGTTTCGCGAGCAGGCAGCATCCGCGCCAATCACCGTTCGACTTCACTGGC  
GGACTTGGTGAATCTGATCTGAACCTGGCGGAAATGGCACGTGCAGAAGCAGCTAAGGCA

GCTAACGCACCAGTGGTTGAGGCTCCACGCACAGTGGCAGCACTGCCAACTCCTTACCGA  
CCAGTGGTTCAAACACCCCTGATTTTCGCAGGTCAAGTCACCCAAAACCTTGACGAGATG  
GTCGTCATCGTTGGCGCCGGCGAGCTCGGCCCACTGGGTCTGACAGTACGCGTTTCGAC  
GCCGAATCAACGGTTCCCTCTCCGCCGCGGTGTATCGAACTTGCATGGACGATGGGA  
CTTATCCACTGGGATGAAGATCCAAAGCCAGGCTGGTACGACGACTCCGACGACGAGT  
GCCGAAGAAGACATCTTCGACCGCTACCCACGACGAAGTCATGGCACGCGTTGGTGTCCGC  
AAGTACAATGACATGCCTGAGTACGGCATGATCGACAACCTTGCACCAGAGCTGACCACC  
GTCTACCTCGACCAGGACCTCACCTTCAACGTGGGATCCCGCGAAGAGGCACTGACCTAC  
GTCGACTCCGAGCCAGAATCACCTTGTCTTTCGACGAAGCAGCAGGGGAGTGGAAG  
GTCACTCGCAAGGCAGGCTCCGCAATCCGCGTACCTCGCCGCATGGCGATGACCCGCTTC  
GTTGGTGGACAGGTTCTAAGGACTTCGACCCAGCTGTGTGGGGCATTCAGCTGACATG  
GTGGACAACCTGGACACCGTCGCGCTGTGGAACATTGTCTGTACTGTGACGCTTCCTG  
TCCGCTGGATTACCCAGCAGAGCTGCTTGGCTTCCGTTACCCAGCAGCGGTGTCCTCT  
ACCCAAGGCACCGGCATGGGCGGCATGGAATCCCTCCGTGGCATCTACGTCGACCGCATT  
CTGGCAGAGCCACGCGCCAACGACGTTCTGCGAAGCACTGCCCAACGTTGTTGCAGCT  
CACGTCATGCAGTCTACGTCGGTGGCTACGGACAGATGATCCACCCAGTCGCAGCTTGT  
GCAACCGCAGCTGTTTCTGTGGAAGAAGCACTGGACAAGATCCGCATCGGCAAGTCCGAC  
TTCGTTGTGCGCAGGTGGCTTCGATGCCCTGTCCGTTGAAGGCATCACCGGCTTCGGCGAC  
ATGGCAGCAACCGCCGACTCCGCGAGAGATGGAAGGCAAGGGAATTGAGCACCGCTTCTTC  
TCCCGCGCCAACGACCGGCGCCGCGGTGGATTTCATCGAATCCGAAGGTGGCGGAACCGTC  
CTTCTGGCAGCGCGGATCACTCGCAGCTGACCTGGGCTTCCAGTACTCGGTGTCATCGGA  
TTCCGAGAGTCCCTTTCAGATGGTGCCACACCTCCATCCAGCCCCAGGCTTCGGTGCC  
CTTGGTGTGCTGCTCGCGATGGTGTGGAATCTCGCCTTGCAGTAGCACTGCGTTCCGTCGGT  
GTCTCTGCTGATGAGATCTCCATTATCTCCAAGCACGACACCTCCACCAACGCGAATGAT  
CCAAACGAGTCCGACCTGCACGAGCGCATCGCATCCGCTATCGGTGCTGCAGACGGCAAC  
CCGATGTACGTGATTTCCCAAGAAGTCACTACCGGACACGCCAAGGGTGGTGCAGCAGCA  
TTCCAGATGATCGGTCTCACCCAGGTCTCCGATCCGGAAGTGGTGCCAGCCAACCGCGCA  
CTCGACTGCGTTGACCCAGTACTGTCCAAGCATTCCACCTCGTCTGGCTGCGCAAGCCA  
CTAGACCTTCGTGCGAAGGCACCAAAGGCAGGTCTTGTACCTCCCTTGGCTTCGGACAC  
GTCTCCGCTCTGGTTGCGATTGTTACCCAGACGCTTCTATGAGGCAGTTGCTGTGGCA  
CGTGGTGTGCTGAGGACGCTGACGTATGGCGCGCATCCGCGATCGCTCGCGAAGAAGCAGGC  
CTTCGTACCATCGTCGCGGTATGCACGGTGGCGTACTGTACGAACGCCCAGTCGAGCGC  
AACCTCGGTGTCCACGGAGACGAGCTAAGGAAGTTGAAGCTGCAGTCTCTGGATTCC  
CGCGCCCGCCTAGTTGACGGTGTCTCCGCGCCGAAGGC

>RXA00563-downstream  
TAGTTGGTTATTGCGTTGAGCCC

>RXA00564-upstream  
CAACGATGGAGTGCTATTTCGTAACGAGGTGACATTCCCACCGGCACCTTGATCCAGATAG  
AAAAACGGATGGAACCAGTATTGGGAAAAGGATGGTTGCG

>RXA00564  
ATGAAATACAACGTGATGTCTCTCGTGAAAGCGAGGACTGGCTCGCCACCGTCACCAAT  
CTCGAAGGCGTATCCACGTGGGCGACAACCTTCGCCAACCTTGATCGCAACGGCCGGGAA  
GCCATTGCTCTAGCTGAAGATCTCCCCGAAGGTGCGGAAAGCTCACTGACCATCTCTTGG  
TCGGTTCCCTACAGATTTCCACCCCGAAGTGGACACTGCAATTCAAATTGCTCAACAGCGT  
CGCTATCTAGTGCAAGCCCCAACAAGACTTAGAGCCCCAAGTTCGATCCGCTATTTCCGCT  
CTACCCAAAGCTGCGCTGCTAGGTATGACTGCAGGTGAGTATCCCCAACTCACAACCCG  
GGTAGCAGAGCTATCTCATTGGATCAGGTGTCAGGAGTTTAAAC

>RXA00564-downstream  
TAGCGTGCGCAATTCCCGTGTGA

>RXA00573-upstream  
GACGCCAACTCCATCTGTGTTTCATGGGGATAATCCGCAAGCTCTCGCATTTGGTGGAGAAA  
ATCGTGACCACCTTGCAGCTCATGAGGTTTCAGGTTTCCC

>RXA00573

ATGCTCGTTAGGCCATGTGGTGAGCAAGCAGTCATCATCGATTTGCTTGCTGAAGATGCC  
GAAGCCGTCCAAGGCAGCATCTTGGATGCTGTTCTTGCACTCAACCGCTCTTTGGTGGGC  
ATGCAGGTCCCTGGAATCATCGATACTATTCCTCGCTGCGCAAACACTGTTAGTGACGTTT  
GACACCAAGCAGATCACCCGAATCGTTTCGCGAGAGATCGTTGATTCAATTGCGCTGACC  
CCAGCCGCAAAGGGCGCAGCAGAGCTTACCGACACCATTGAGATTCCCGTGGTCTACGAC  
GGCCCTGATCTAGAAACCGTAGCTCAACACACAGGCTGAGCGTGGAGGAAGTTATCGCC  
ACGCATTCTGGCACCGTGTGGACTGCTGCTTTCGGTGGATTTCACACAGGTTTACTAT  
CTGATCCCCCAGACTCCCTGTGGGATATTCCCGCTTGAATCGCCACGCACCAAGATT  
CCTGCAGGTTCTGTGCGAGTGGCCGGTGAATTCAGCGCTGTGTACCCGAGCAGTCCCT  
GGTGGTTGGCAACTGCTGGGCACTACTGAGATTCCCATGTGGGATGTGGACCGGTGGCAA  
CCATCGCTTCTCAAGCCCGGTGATTCAATTGCTGCTGCTGAGGTTGCTGAGGTTGAAGAA

>RXA00573-downstream  
TGAGCTTCAAAGTAATTTCCACT

>RXA00574-upstream  
AACTGCTGGGCACTACTGAGATTCCCATGTGGGATGTGGACCGGTGGCAACCATCGCTTC  
TCAAGCCCGGTGATTCAATTGCTGCTGCTGAGGTTGAAGAA

>RXA00574  
ATGAGCTTCAAAGTAATTTCCACTGGCCCCCAAGCCATCTTCCAAGACCGAGGTGCTTC  
GGTTTTGCCAGCGCTGGTGTGGAACTCAGGATCCTTTGATCGTTTATCCGCTGCTCGC  
GCGAATCACGCTTTAGGTAATGATCCCAATGCAACCGTGGTAGAGATTCTGCTCGGTGGC  
TTTGAGGTGGAGGCGTTGCACACCACCTCGATCGTGTTCACGGGAAGTGAAGCTGAAGTG  
ATGGTTTCAACGGCTGGTGGACAATCCAAAAATGCCACCACCAACCATCATCGATGTT  
GCAGCTGGTGAACGTATCCGCGTGCAGCCCGCAACCTATGGCATGCGTGCTTACTTTGCT  
GCTCGCGGTGGATTTCAGTAAGAAAAAATTTGGGATCTGCTTCAACCGATCTGATCTCC  
CACATGGGCCCTTGCCCCGATCGAGCCCGGGGATGTCATTGACGTAGCAACAGACATTGCA  
GATTCCTAGTGGTGGCAAACTTCGGCAACTGCCACCTTATGGAAACGCATGCCAACA  
GAAACGCTTACCGTCATCCGAGGTCCACGTGACAAATGGTTACGCAAGAATCCCTCAAC  
AATTTTTTACTCAGGTGTTTACGGTGAAGCAATGACTCCAACCGGATTGGTTTGGCGATG  
CACTCAAGCGAGCCGATCCAACATCGTGTGGAAGGCGAGCTGAAAAGTGAAGGAATGGTC  
CGGGGGTCCATCCAGATTCCGCTGGTGGAAACCCCGTGGTGTGTTGGTCCCGATCATCCT  
GTGACCGGTGGCTATCCAGTAATAGCAGTACTTACATCAAGGTGCTGTGATCGTTCGGCC  
CAGCTGTTGCCGGGCGATAAAGTCAGATTTAAATTGCTT

>RXA00574-downstream  
TAGGAACCTTTGAGCTTGCTCTGG

>RXA00576-upstream  
ACAGTCCGAGCTTCTTAGCGGCGGTCTGTGGCTTCATAGCCCTGCCGATGGCTGGCGTA  
CAGATTCTTCGTTACGCCCCACAACGGTAGCATTGTTTTT

>RXA00576  
ATGCTGACCTTAAGTTTCATCACTGGCAGCGAGCCAGGAAAGTGGTTTACCCGATTCCGA  
GATCGGACTCATCAGGTGGACTTGAGACCCTTGATTCCGACGACGCCCTAGGCCTCATG  
CTCGTGGCCAGGCACAACCTCGCTTAACCAAGCTTCCAGATGCGCGTATCGACGCCTCC  
CTCCACGTGGTCACTCTTTATCAGGAACAACCCGGAGTCGCTTTTCCAAAAGACTTTTTT  
CTCAGTGCCGAAGAAGGCGCGGTGGACCTTGCGGACTTAGATGGGGAGATCATCAACTGG  
TCCATGCCCCGATAGTGGGAAGTCGATGCCGCTGCTGTTCGCGATGCTCTGCAAATCGTG  
GCAGCGAACGTCGGTGTGGTGATCGCCCCAGGCCACTTCTCAAGGTGTTGAGCAAGAAA  
TTGGTGGAGCACCGGGACATCAAGGGTGAAGTGAACATCTATCGCCCTGGTATGGAAG  
AAAGATGAGGATTCTGAAGAGATTCAAGACTTCGTCGGTATTGCTCGCGGTGCAACGCGG  
AATTCCAGCAGGCAGCAACGGTAAAGCTCAGTGCTCGTGAAAAAAGTGGCAAAACAA  
GCCCCGAGGCAGGGGAGAAACCAAAATCCGAAGCGTCCGAGGCAAGAAAACGTCCC  
GGAAAACGGCGA

>RXA00576-downstream  
TAGGGGTACCCGCGCATGTCCG

>RXA00577-upstream  
CTGGCTCCGTGCCAGTGATGAAACTTAAGGTCAGCATGAAAACAATGCTACCGTTGTGGG  
CGTGAACGAAGAATCTGTACGCCAGCCATCGGGCAGGGCT

>RXA00577  
ATGAAGCCACAGACCGCCGCTAAGAAGCTCGGACTGTTTTTGCCCGCCACGCCAGAGGAG  
TTCCAAACAGGTGCATTGACTACCAAGAGTTCAAGAACCTGCAGGAAAACCCACCGGAG  
TGGCTCCAAACCCTACGCCGCGAGGGCCCCACACCCTCGTCCAGTGGTCGCCCAAAATTG  
GGCATCACCATCGCGGCTCTGAAAAAGAACGACATGGACAAACCACTGACCACCGCCGAG  
ATCAAGGCACTTCTGAAAACAGCCAGAATGGTTGCGCACCGCACGCACACAGCTTGCT  
GAAGGTCGCGAAACCGCAAAGAAAAGAACTGAAGAACTACCGAAGAC

>RXA00577-downstream  
TAAATCTTCACAAAGACTGCGCT

>RXA00578-upstream  
TGGGCGGTGCACTTCTTGCTCTGTCTGATCCGGAGGCTGAGTGGGAGGAAATCCGCGTTA  
AATCACGGCCTCTGCTGAATTTGTTTGGGGTTGAATTCCC

>RXA00578  
ATGACGTACCTCGTGTGGGACGGTGCAACACTCGTAGAAGGCGCGCTGGAATCAACACCC  
ACAGTTGTTGATTCTACCTAGCCAAAGACCACCGCGTGGTGCCTGGGATCTTCATGAA  
CAGCGCTTCGCCACTAGCGTGGACGTGGACCCGTTGGGATTTTCTCCACGCAGTAAGGGAA  
GCAATTCCACGCCAGGGCTCATGGTTTCCCAAAGTTGAATGGCATGGCGATGATCTTTTC  
GCAGTCAATATTGCCCCGCCACCAACACTGCGAAAGGCCACATCATTGTGGCTTTCCGAA  
GACCCAGATCCACGCACACAGCCAACCATTAAAGGCCAGACCTAGATGTGCTTGCTCAC  
CTTCGCAGTCGCGCCAACGATAACGGCTGCGATGATGCGCTGTTGATCAGCGCGGATGGG  
TTTATTCTGGAAGCTGCCAACGCCACCGTGGTGTGTTTGGGCGGATCCACAGACGGTCATC  
GTGCCAGGGGAGATGTGCTCCCATCGGTGACACTCGCCGCAACCATTCGCTGTGGGAA  
AAAGCCGGAATCACATTGCGCTATCAAAACATTTCGGCACATTGGTTTCCCGCGTGGTGC  
GGTAGTTCGCTGCATGGTTGGACACCTGTGGTCAGTTGGGGCAGGGGATTGGGCAAAATT  
GCAGCAGCGAAAGCTCCATCGGTGAAGCCCTGGAATGAAAAATTGCGCCCAACCATTTTT  
CTG

>RXA00578-downstream  
TGAGGAAAAGGTTGAGCGCAGTC

>RXA00582-upstream  
ACTGGCCAGCCTTCCGACGCATCGACTTCCTCCGCGCCATTCGCGACTACTCGCAGCGCA  
GCAGAAGATTCCGTAATAACTTATTCTCCAAGGAGAGAC

>RXA00582  
ATGTCTGACTACATCGTCGCATTTGAATCCGCATACGGCTCTACCAAGCAGTACGCAGAA  
TCTCTGGCGCAACGCCTCGGCGTAGATGCCTTAAATTTGAACAAGCGTGTGCGGAACTC  
GCGGCGAACCCGACCGCAGCAATCGTGGTTTTGAGCTTTGTTACGGGCCATCCCATCCA  
GGTGCGAAATTCATTACCGATACCGATCTCTCCGGCCACCGCGTCGCACTGTGCACCGTC  
GGCATGACGCTTGATGATGTCGTGCAAAAGAAGGACGGCGCAGCTCGATCACTGGGAAAC  
AAGGCAGACGATGTCACCCGTTTCTACCTTCCGGGACGCCTTAATTACTCAGAGCTCTCG  
ACCGCGCACCGCACCACCATGTGGACGATCGTCAACATGCTGAAAGCGAAGCCGTTGAAG  
AATGACAACGACAAAATGATGATCAACACTTTTGATACCGATGTTGACCGCGTCGATGAG  
TCCCGCCTGGACGCAGTGGAGGAGTGGGCGAGGGGCCTC

>RXA00582-downstream  
TAGAGTGGGCGTTGCAAAAATC

>RXA00585-upstream



TGTGAAGACGTCGATCCCAGAAGATGACCTGTTTGGCCGAATCACACCCGATGCAGAATA  
ATGCAGTTAGACCACATCCTTTAGGAAGGACCTTTTCGGC

>RXA00585

GTGATTGACCTCAGCCCTGTATTCAATACAGCTGCCGGCGTATACAACGACACCAACGCA  
ATCATCTTGGCTCAGCAGCAGCAAGGTGGACCACTTGGACCTGAGTTTGGAAAGGCCTCG  
CCGGTTGGTTTGTACTGATCGTCGCGATGCTCGTTGCCATTCTTGTCTCGGCTGGGCG  
TTCCACCGACGCTGGTCACGGATGAATCGTCGTCGTATTTTCGCAGAGCGCAACGGCCTT  
GATCCCTTCGATATTGAGGGTGTTCGCAAGGCAATGGCTGAGGCCGGCTTGAATGAAAAG  
TCCAAAAGGGCTTCCTT

>RXA00585-downstream

TAAAAAGAAAGTGTGTTAAGGTT

>RXA00586-upstream

TCATCCAAGGGGTAAATAGGTATGACGGCGGAAACGACTATCATGAATGCAATACACATC  
AACTAAACCCTGCGGAAGCATATAAAGCTTCAAGGAAAGG

>RXA00586

ATGAAACACGTGAGTGGTCTACGCCTAATGGCGATCCACGCCCACCCTGACGACGAGTCA  
AGCAAGGGCGCAGCAACCATGGCGCGCTATGCAGCTGAGGGCAATCAAGTAATGGTTGTT  
ACCTGCACCTGGTGGTGAGCGTGGAGACATTCTCAACCCTGCTATGGATAAGCCAGGAATC  
CTGGACAATATTTTTGTCTGTGCGTCAGGAAGAGATGGCGAAGGCCATGGAAATCTTGGC  
ACTGAGCACAGATGGCTAGGTTATGAGGACTCTGGGCTGCCCCAAGGTGATCCTTTGCCT  
CCTCTGCCTGAGGGCTGTTTTGCTTTAGAAGACTCGGATAAAGTCACCCAAGATTTAGTG  
AAGATTCTGCGCGAGTTCGCGCCACACGTCATCATTACCTATGATGAGAACGGCGGTTAC  
CCACACCCGGATCACCTCAAGGTTTCATGAGGTGTCGATGCTTGCATGGGAGAAGTCCGGC  
GATGCAGCGTATGCACCTGAGTTGGGCGCACCGTGGGAGCCACTGAAGCTTTATTACACC  
CACGGCTTTATCCGTCAGCGCATGGAAATGTTCCATGATCTGCTCATTGAACAGGGCAAG  
CCCAGCCCATACACCCCGATGCTTGAGCGTTGGAAGGCAAATGAGGCTGATGTGATGGCT  
CGAGTTACCACTCAGGTTCCCTTGTGAGCGCTTCTTTGATCAGCGTGATGACGCCCTGCGT  
GCGCACGCAACTCAGATTGATCCTGCGGGTGCTTTCTTTGGAACCTCCGTTGAGGTGCAG  
CGTCGCCTGTGGCCGACTGAAGAGTTCGAATTAGCTAAAACCTCGTGTGAAGACGTCGATC  
CCAGAAGATGACCTGTTTGCCGGAATCACACCCGATGCAGAA

>RXA00586-downstream

TAATGCAGTTAGACCACATCCTT

>RXA00587-upstream

CCCTTGATGACCTCGGTTAACAGTTTTTTCCTGAGGTGACTAAGATGTATAGGTGACCAA  
CTCGATTCCGGCTTTGAAGAGGATGCAGACAGACTTCCATC

>RXA00587

ATGAGTACAAATTCCAACCTCTCCATCCAACGCATCAGGCGCTTCGAACATTCCAAACACC  
CAACGTCCGGCTAGCCGATACAATTTCGCCTCGCCCGGAAGCTGCTGCAGGCAGGAACATC  
AGCGGAAAAATCATCGCAGTCATTGGCGTGCTGCTGGTGATCGCCATTGTGATTGTTGGC  
GCAAACTTCCTCAAAAACCGCGATGCACAAAACAGTGTCCGGCCAAATGGGTTTCATTTGAA  
CGCATCGACGACGACACCTTCCGCTTTGAAGTTGACGTCACCCGCGATGACCCAAGCCAA  
GTCGCCTACTGCATCGTGACCGCAAAGGACTACTCGCACGCAGAAGTCGGGCGTCGAGAA  
GTGCTTGTGGAGCCCAGCGACCACTCAACGGTGCGTATCTCCACGCTGATCCCCACCCGC  
GAACCAGCAGTTTCCGGTGGTGTTTACGGTTGTTCAACCGTGATCCCATCACATATGAAC  
CTG

>RXA00587-downstream

TAAAACTAGAAAATTTTGCTGTG

>RXA00589-upstream

CCGTTATCTCCGTAACGTGTTGTTTCTGAGAACCATACAACCTAGCAAAAGCCGCGACAC

TCCGCGGCAAAACTAACCAAGGATTTAAAAGTCTTCAA

>RXA00589

ATGACAACCTCTTTCACGTAAGTTCTTCGTTTCTGCTACCACAGCCCTGGCGGCAGTCGCA  
CTGGTTGCGTGTTCCTTAATGAGATTGATTCTGAACGAAGGTGCCAACGGCAACTGGC  
GTTTCTTTTACCTTCGAAGAAGCTTCCGCGACCTCAACTGCTACTACAGATGAGGATGCG  
CCTGGCTACATTGATTGCGTAGCCGACCAACTCAGCAACCTGCTGAAATCTCACTAAAC  
TGTGCAATGGATATTGATCGGCTCACGGATATTTCTTGGAGCGAATGGGATACTGATTCC  
GCAACTGGAACCGGTACCCGCATCGTAACCGCTGCAAATGGTCAAGAGACCGAAACCGAA  
GAT

>RXA00595

CGCAATATTGCAGCATGGATCGCAATCGCCGCCATCATCATCGCCAGCCTGGGCGCACTG  
CTCTCGATGATCCGCGTGTGGCGTGAAGTCTTCTGGGGTGGCGCAATGCACCGCGCGGC  
GTCTCGCCGAGCTGCGCATCAGCCAGCAAAAATCGCCCGAGCGCTCAGCCTGATCATT  
TTATCGGTAGGCATGTTTCATCTTCGCGGGCCCGCTTATCGACGCGACCCCTCACCGCCACC  
GACGGCTCTTGAACACCGATGCATACCAACAGGCTGTGCTCGGTGAAAATGCCATCGGA  
GTGCCAAGCCCTAGCTACCAGGGAGGAAAC

>RXA00595-downstream

TAATGCTTAACGCCCTGAAATTC

>RXA00597-upstream

CAAGGAGATCCGCCCCAGCGATGCTGAGTGGCCAAGTCGCGAGATCGCTGACACCGCCCCA  
AAACACCGCTCAGCCAAGACAAGAGGGAGTTTTTAAACAAC

>RXA00597

ATGACTGCTTTTGAATTGTCACCACAGTTGGCATCTGCATGTTTGGCTTCTCCCTCTTA  
TCTGCCCTGGTCTTATTCTGCGCACCAAGATTTCCTCACCCGCGTGGTGCTTTCCGAC  
ATGGTTTTCTACTCTATGATCGCGATCTACCTCATCTGCGTCAACAACCCAACCTCA  
ATCGCCTTTGAGATTGCTCTTCTCGCAGCAGTCTCGCGGCGGTACTTCCAACCTGTCC  
ATGGCTCGCATCATTTTGAAGGGACGCAGG

>RXA00597-downstream

TAAATGACCATTCCAGAGATCAT

>RXA00598-upstream

AACCTCAATCGCCTTTGAGATTGCTCTTCTCGCAGCAGTCCTCGGCGGCGTACTTCCAAC  
CCTGTCCATGGCTCGCATCATTTTGAAGGGACGCAGGTAA

>RXA00598

ATGACCATTCCAGAGATCATCGTCTCCATCCTCGTGATCCTCGCAGGCCTGTTTTCTCTA  
GGTACTGCAATCGCTTTGTGGCGCGCACCGGATCCGCTCACCCGAGCCAACCTGCTTGGC  
ACCACCGTGGGTGTCTCCATACCGCTGCTCATCATTTGCGCTGCTGATTACACCTGGTCC  
GTCGACGGATTTAACCCCAACAATTTATCCGAGCGATCATCGCCATCATCGGCGTCTGG  
GTCATCGGTTCCGTGTTCTTACTACATGGGACGCGCCATCTATGGTGTGACCGTAGTG  
GATAACAGACGATCCAAA

>RXA00598-downstream

TAAACTGCTTTTAGAAAAAAGG

>RXA00601-upstream

TAGATATAGAACACATTCTATTGCAGGGAATTATCAAGTTTCATACATTGTCTCTGATAGG  
GGCAAGTATATTCCCATGCAATATTTTTTAGGAGTCCCA

>RXA00601

ATGCGTTTCAAGTCAGTTGCAGCTATCGCACTTTCCACCGCAATGATCAGGGGTGGAACC

GCAAGCGTTGCTAATGCTCAGCAGGTTAGCCCTAGTTCCACGATTGAGATCCCTCAAGAA  
TTCGTCCACACCGTGCAGAACTTCGTGCCAGGTATGACTTACGGCGATGCAGGGTCCGCT  
ATCCAGAGCACCGCTGGTTCTGTGGCACTGAACAGTACCGCTGGAATCATCCTTCCAATC  
GTTCTTCCATTCTTGGTCTGGGAGCTGTTGGTTCTGCAGCGCTGTCTGCT

>RXA00601-downstream  
TAAGCCTTTTCTAGGTTCTTAA

>RXA00602-upstream  
GCGCGATCAATGGAATCTAGCTTCATATATTGCACAATAGCCTAGTTGAGGTGCGCAAAC  
TGGCAACAAAACCTACCCGGCAATTGTGTGATGATTGTAGT

>RXA00602  
GTGCAAAAAACGCAAGAGATTCAATCAAGCCTGGAGGTGTCGCCATCCAAGGCAGCCCTG  
GAACCAGATGATAAAGGTTATCGGCGCTACGAAATCGCGCAAGGTCTAAAAACCTCCCTT  
GCTGCAGGTTTGGGCATGTACCCGATTGGTATTGCGTTTGGTCTCTTGGTTATTCAATAC  
GGCTACGAATGGTGGGCAGCCCCACTGTTTTCCGGCCTGATTTTCGCGGGCTCCACCGAA  
ATGCTGGTCATCGCCCTCGTTGTGGGCGCAGCGCCCTGGGCGCCATCGCGCTCACCACA  
TTGCTGGTGAACCTCCGCCACGTATTCTATGCGTTTTTCATTCCCGCTGCATGTGGTCAA  
AACCCCATTTGCCCGTTTCTATTCCGGTTTTCGCGCTTATCGACGAAGCCTACGCAGTCACT  
GCGGCCAGGCGCGCAGGCTGGTGGCGTGGCGACTTATCTCAATGCAAATAGCGTTTCAC  
TCTTACGTTGGTATTTCGGCGGCTCTACCGGAGTGGCGATCGCAGAGTTGATTCCTTTTGAA  
ATTAAGGGCCTCGAGTTGCGCCCTTTGCTCTCTCTTTGTACGCTGACTTTGGATTCTCTGC  
CGAACGAAAAAGCAGATCCCTTCTCTGCTGCTCGCAGGTTTGGCTTACCATTTGCTCTT  
GTGGTAATTCCAGGTCAGGCCCTATTTGCGGCGCTGCTGATCTTCTTGGGTCTGTTGACC  
ATCCGGTACTTCTTCTTGGGAAAGGCTGCTAAA

>RXA00602-downstream  
TGACAACTGATTTCTCCTGTATT

>RXA00604-upstream  
ATCACGTTTTTGCTATGAAAGTGGTGAAACCAGCTCGCCCCCAGGTGTGAAGCATGCATTT  
TGAAGCATGAATCTTTTTCATCTAGTGAAGGACTGATCCC

>RXA00604  
ATGCGTATGAAATCAATCGCAGCAATTGCAATCGCTACCGCCGCCCTGGCTGGTGGCACT  
GGAGTCGCTAGCGCACAGGAAGCTGGCTCGACTGCTGGTTCTCTCAACCTCAGCTCTGGG  
ATCCAGCTTCCACAAGAAGCCACCGATCTGTTGAGCTTCTGCGCTGCTGCTCAGGCTGCG  
CAGGTTGAAGGAGCAATTCAGAGCACCGCTGGTTTCTTTGCGGTTGGACTCGGCTCGACC  
GCCATTGGTTCCACTGCAGTGACCTTGGGAATTGCGGATCTGCTGTCTAGC

>RXA00604-downstream  
TAATTTCTCTCAATAGCTTCAA

>RXA00610-upstream  
CAAGCACTCCCAGGGGAACGTTCAATTCGAAAACTCGACGCCCTTATACGAGCTTCTAGAG  
CCTCGGAACCAATTGCTCGAGATCGCAGTCTAACTAGAGT

>RXA00610  
ATGGAACCGAAAAACCTGTACATATAAAGAACTTGCCACGAATATTCAAGAAGAACG  
TTTAACAAACTCTTACCAAAATTACTGGCTTCGTCTATCTAAAAAACGATCTAATCAAC  
GATCCCAACTTAGTGACCCAAGCACTGCTCAAAAGATGCCCAGAAGGAGTACTTCGCGGA  
TATGCAGCATTAAGCAACGTGGCTATCAGCTTTTAGACGATCAGTGGATGCCAATCATC  
AGTGTTCCTGGAGATCTAAACAGGAGGACTGCTCACGAGGTGAAATTCTCAGGCGGATT  
GAACCAAGAAAAACCCCTGCTCAGTGGCAACATTAGGTTCGTTAATGATGTTCAAGCGATC  
CAAGACGTCTTCGACCTGCATTTCTCTCAACGACTTTGAAGACCAAGTAGCTCTCATCGAT  
CATCTCATCAGGCAGCGCCCCGAATTATTCCAAGAACTCATACAAGAGCCAAAACCTAAG  
AAACACACTCAATACGCCAATCCTTTTGCTGAATCTCCGCAAGAATCACGACTTCGGGTC

AGACTTCATTCACCTGGGTTACCACGGCTTCATCCCACAGATTCATGTTGAATACGACGGT  
CAATCCTATTTTCTAGATCTCGCAGATCCGCTGTGGCAGGTTGCCCTCGAATACAACGGC  
GGATGGCACTACACCTCTGAGCAGCGAGAGAAAGATTCTCATCGGAAGAATGCTCTGAAA  
AGTGCGGGATGGGATGTCTAGAAAGTGACATCAAAAACCTCTGCAGAATCCGAATTCCTGG  
AACAACTGATACAACAGATCAATAGCTCTCTCCGCCGAAAGCAGGCTCAGCGACGCCGA  
AGGTTACCCATGCAAACGGTGCGC

>RXA00610-downstream  
TAACGGCATCACTGAAAAAGACC

>RXA00611-upstream  
CTTTAAATTGACTATTTACAAAACCTACTTGATGAGTTAGCAAGAGCACATTTTCGGTGCGC  
CTCCCTGCTAAACCTCGAAACAATAACTAGATTGCACACT

>RXA00611  
ATGTCTGCCGCTGCTTCTCGATCAAGAAACATCTTGACTGCCCTCCTGCTATTGGTCCCG  
CTCATCGCAGGTACCATCTACGCCTCCGCCATGGGCTTGACGCTCTCCCGCGCATGGTCC  
TCAGCAGATGAAGTAACGGGGGCACCTGCAGCCTCCGTAGCCACCAACAACCAGGAGCTT  
ATCGAAGCCCGTCGCGCCGCGGAGAAAGCCGGCGCCCAAGCGGGGTTCCCTCACCTCAGGA  
ACTGAAGAGCTAACAGCGGAACACAAGAGCTTATCGACGGCGCAGCCCCACTCGAAGAA  
GGCGTCTCAGCCGCGGCTGACGGTGACGCGCAACTCCACGATGGCCTCATCCAACCTCCAG  
GCCGGCACTGGACAAATGGGAACCGGCGCCACCGAAATTGCCGACGGCGTCCAAAACGCA  
GTCGAACAACCTGGCGGCTTGTGCTGTGTACAGCAGCAACTCTTAGGCGCCCTCAACGAA  
GCAGACAAACAACCTCGCCTCGAGCAAAATCCCCGAAGCCGAAGACCTGCGCAAAACAATC  
ACCGAAGTCCGAGGACACCTCGAAAACCTTCGGCATCTCCGTAGAAATGACCGACCAACTC  
GATCAACTACGTTCCGGCACCCGCGACCTGGCTAACCAACTCGCAGTCCCCGGCTACGGA  
TTCCACGATGGTATTTACAGCGCCACCAATGGAGCAGCCGAATTATCTGCAGGTTTGCAA  
GAGCTAGAAGCAGGCGTTGGGACTGCCGTGCAAGGCTTCACCGCACTCGATGAAGGTGCA  
AACCGATTAGACTCCATGGCCACCCCTCAACGAAGAAAAAACCTCCCGAGTCCAACGAGCC  
CTCCCGGTACCCCAAGTACCCGCGGCACAATCGAAGGCACCGCAGACGAAGAACGCACC  
AGCGCACTAGCGCCCATGTACGCCTTCTTAATTTACGATTGGTCATGCTGGCCGGTGCA  
GCACCTTGGATGGGCAACACTAAAAAACAAGTGGCTGATGGCCTTTGCTGTCATTGGTGTC  
ACTGCAATCGGTGGCATTATCTTGTTCACCGTAGCTTTGGGCATATCCATTGGAGCTTTG  
TTTGGAGCCTTAGGAATTTTGCTTCTTGCCACTGTTGTTGCCGGTATTCTCTCCCGGATT  
TTGCTTGACGTGTTGGGAACCTACCGGGGCTATTGTGGTTTCTGTTCTGGGATGGGTAGCC  
CAAGCTGCAGTAATTGGCCATGTATGGAGTGTTACCGCTGTATCCGATATCGCACTTGTT  
TGGCGAGTCGTCGAGGCATGATGCCACTGCATTATCCAACCTTTGCAGTGACCTCCATT  
GGTAATGGCGGATCAGCTGCAGCTATCTGGATGTCTGTTGCTGTCTTGTGGCAATGGGA  
GCGATCGGAGCTGTTGCGCTTCGGAAGCCAAAGGCGGTTGCGGTTGAGGTTGAAGAAGCT  
GTTGATGCTGATGCAGACCAAGCAGCCTCGGAATCC

>RXA00611-downstream  
TGATGGTTTTGGTCTGATTCGAC

>RXA00613-upstream  
TGGCGATACCAGCTCCGAGTAGGGCTGCACTTGAAAAAGTGAGTGTTTTAGCGATAGTTG  
ACACCTTATTACCCCTACCTGGGGAGTACTCTGGGCAAAC

>RXA00613  
ATGAGTGAACATAAAAGACAAAATCCGCGCAGATCTGACCACCGCTATGAAGGCCGCGAC  
AAGGACACCACTGGTACCTTGCGCATGCTGCTTTCCGCATTGACCCAGGAAGAAACATCG  
GGAACCAAGCAGAACTCAATGATGAAGAAGTGTTGAAGGTGATTGCTCGTGAGATTAAG  
AAGCGTCGCGAGTCCGCTGAGGTGTACACCGAAAATGGTCGTCAGGAATTGGCTGACGTT  
GAGCTTAAAGAGGCTGCCATTTTGGAGGGCTACCAGCCTGAGCAGCTTGATGATGATCAG  
CTGAACGCGCTGATCGATGAGGCTATCGCTGAAGTCGGCGGCGAGGCCGATATGAAGAAG  
ATGGGCCAGATCATGAAGGCTGCTACCGCTAAGGCTGCTGGCCGTGCAGATGGAAAACGA  
CTCTCCACCGCAGTGAAGAGCCGTTTGAGCAAC

>RXA00613-downstream

TAGGTATTTCTAGCGGAAGAACT

>RXA00614-upstream

CAGTGGTGTCTTGTGCGGGCCCTTCATAGCGGTGGTCAGATCTGCGCGGATTTTGTCTT  
TTAGTTCACTCATGTTTGCCCAGAGTACTCCCCAGGTAGG

>RXA00614

GTGAATAAGGTGTCAACTATCGCTAAAACACTCACTTTTTTCAAGTGCAGCCCTACTCGGA  
GCTGGTATCGCCACCGCTGCATGGGGATACTCAGAGCTCAAAAAATTCGAGCTCAAAACA  
GTAGAAGTGCCTATTTTGAAGCCTGGAACGCTCCGTGGAAAGAAGGAATTCCGCCTTCTC  
CACATCTCTGATCTCCACATGATCCCAGGCCAAGAAACCAAAAAAGCATGGGTCTCCGCA  
CTCGATTCACTAAGCCCCGATTTGGTGATCAACACCGGTGACAACCTTAGCGATGAAAAA  
GCAGTCCCCGACGTCTCTCCGCGCACTCGGCCCACTGATGAACCGCCCCGGCGCGTTCGTC  
TTCGGAACCAACGATTACTGGGCACCCCGCCCGTCAATCCTTTCGGCTACCTCTTCGGT  
AAAAAACGCGAAGTGAGCCACATCGACCTCCCCGGCGAGCCATGCGAGCTGCTTTTCATC  
GAACACGGATGGCAAGACGCCAACCAAAAGCGACTCGAATTCCAAGTAGGTTCCGTCCGC  
CTCGCCATCTCAGGTGTTGATGACCCCCACCATGACCTCGACGACTACACAGAGATCGCA  
GGGGCACCAACGTGGACGCTGATCTGTCCATAGCGTTGCTTCACGCACCAGAACCTCGA  
GTCTTCGCTCAGTTTGAAGCCGACGGCTACCAGCTTTCCTCTCCGGCCACACCCACGGC  
GGTCAGCTTTGTCTTCCGGGCAGCAAGCCAATTGTACCAACTGTGGAATCGACCGCAA  
CGCGCCACCGGCCTCAACAAATTTGGCGACATGTGGATGCACGTTTCCAACGGCCTCGGC  
ACCTCAAAATTCTGTCCTTCCGCATCTTCTGCCGACCCAGCGCCACCCCTAATAAAGATC  
ACTGAACAGGCACTT

>RXA00614-downstream

TGACCTGAAAAACCCACAGGACT

>RXA00616-upstream

AACCGCAACCTCGCGCACTTGGAGTGAAAATTCTCATCTTCATTTTCATCTTGGTGCCTAA  
CAATGGAATACAGATTGAGTTGATCAAAGGAGAACCCCA

>RXA00616

ATGAAATCACTCCCCGTTTCGCCCCACTGATTACGATTCTGGCTCTGCTCGTACTCGTT  
GCCATCGGAGGATCTGCACTGGCAATAATCGTGCTACCCCTAATGTGGAAAGTGAACCC  
GCCACGGTCAACCAGCGTTCCACTCCCACAAC'TCCGCGTATGAGCCCCCTGCTACAGAA  
TCTCCGGAAGAACCAACCACACAAATTCAGAATCCCCAGTACAACCCCCAGTTCTTGCC  
CCCGCTCAAATTCCTCAAGCCCCACAAGTTCCACTCAATTATCAGTACTATGACGATGAC  
TGGGACGACGACGATGATGACTTCGACGACGACTGGGACGACGAC

>RXA00616-downstream

TAATAACCCCTGAGGCACTTTC

>RXA00617-upstream

ACGACTGGGACGACGACTAACTAACCCCTGAGGCACTTTCTATTTTCATGGCTAAATCAAC  
TCCTTTGATTGCATCGCTACGCTGGCGAATTGTCCTGTGG

>RXA00617

ATGACAGCGGTTGTTTTCTTGACCCTAGCCAGCGTTGTGATCATTACCCGTTCCGGTGCTG  
CTTTCAGAGGTAACCAACACCGCGAAGTTCGGCAGTTGAGCAGGAAATTGAGGAGTTTCGT  
CGCTTTGCGAGCCGAAGGAATTGATCCAACAAC'TGCGCAGCCTTTTGAGTCAGGTCATCGC  
CTGATGGAGGTTTACCTGTGCGAGGCAGATTCCGGATGAAAATGAAGCCATTGTGCGGCATT  
TTCCCCGGAGAGCTCATTACAGGTTGATTACTCCCAGCTCAGTGGCGCCCATCCGCTTCCT  
TTGGAACACTCCGATCCGTTGATTTCCGAAATCCGACAGACCACGCTGAATTCTGGAGTT  
TTCAGCGATCTTGAACGCGGAACCACTCACTGGGGAAAGGTGAATTTCCAAACTGCTTCC  
GGTAGGCGCGATGGTGAGTTTCGTTGTCGATCTTTCGCTGATAATCTTAAAGACCAGGTC  
AACGGCCAGATCCAGATTCTTATTTTGATCGGCACAGGGGGTTTGATTGCCTCAATTCTG  
ATTGCTTGGTTGATTGCGGGCCAGATCATTGCCCCGATCCGCAAATTGAGTTCCGTGTCC  
GCAAAGATCAGTAATTCCGATCTCACCTGGCGCGTCCCTGTGGAGGGTCGTGATGAGATT

GCGCAGCTGGCCAGGACTTTTAATGCCATGTTGGATCGCATCGAAATCGCGTATAACGAT  
CAGCGCCAGTTCGTTGATGATGCCGGCCACGAGCTGCGCACCCCGATCACAGTGGTGCCT  
GGCCAGTTAGAGCTTCTCGCCACCACCCCGCCGGAGGAACAAGCGCGTTCGATTGAGCTG  
GCCACCACTGAGTTGGATCGAATGTCGCGAATGGTCAATGATCTGCTCACCCTCGCAGTC  
GCCGATTCTGGCACCTTCATCCAAGCCACCCACCGATGTCACGGATTTAACAATCGAT  
ATCGAAGACAAAGCCCGCACCATCAGCGACCGAATTTTGCTTGTCGACGCCCGCGAGGGC  
CTCGTCAGCCTCGACGAGCAGCGGGTCACCGAGGCAGTGCTGGAGTTGTTTCGGCAATGCG  
TTG

>RXA00628-upstream

GGTTGAAAGTGGCGTCGAAAAGCGCCTTAAATGACCGGCTCACCTGCATTATTTTATGC  
AACCTCAATTTGGTTGCACGCCAAGTAGTAGTCTGTGCAT

>RXA00628

ATGGCTTCTGTATTACGAAAATTATTAATGGCGAGCTCCCCGGCCGATTTGTGTATCGT  
TCCGAGAATGTCGTGGCTTTTCTATCCATCGAACCCTCACCTACGGCCACACCCTAGTC  
GTACCCGTTGCAGAAGTTGACCGCTGGACCGACCTTCCTCAGAACATCTGGAGCGAAGTA  
AACGAGGCCCTCCAGCTCATCGGAAATGCAATCCGCACAGCATTCGACGCCCTCGATGT  
GGTTACATCATCGCAGGATTCGATGTTCCCCACACTCACATCCACCTCTTCCCCACCGAC  
AAAATGGCCGATTACGATTTCCGCAACGCCATGGCCGCAGACGCCACCGACCCTGCAAAA  
ATGGATGAAGCTGCAGAGAAGATCCGCGAAGCGCTGGACGGTCTGGTC

>RXA00628-downstream

TAGTTCTTGTAGTTCTAATTGCT

>RXA00631-upstream

CCTACCTGCGCCGCAAGGTGGACACCCAGGATCCGCAGCTAATTCAGACTGTTTCGTGGCG  
TTGGATATGTTCTGCGCACCCACGTAGCTAAATTCTCCT

>RXA00631

ATGGAATCCTTATGTTGCTGCGCTCGATGACGAAAACCAAGAAGTCGGCGTAAAAAA  
GAAGCAGAAAAAGAACCTGAAATAGGTCCCATCAGAGCTGCCGGACGAGCCATACCGCTG  
CGCACCCGCATCATTTTGATCGTGGTGGGTATCGCCGGGCTTGGTTTGCTGGTCAACGCG  
ATTGCTGTCTCCAGCCTCATGCGTGAAGTTTCCATATACCCGCATGGATCAAGAGCTAGAG  
ACCTCGATGGGGACGTGGGCGCATAACGTTGAGCTGTTAATTTTCGATGGCGTCCGCCAA  
GGGCCACCCAGCGATTATATGTGGCCAAGGTTTTCTTGATGGATCCAGCATCATCTTC  
AACGATGCACAATCGGCACCCGATCTAGCTGAAACCACCATCCGTAAGTGGTCCACACACT  
GTGGATGCTGTAGCGGTTCTGCCTCCAACACTCCGTGGCGTGTGATGGCGGAAAGAAG  
GGTGACATTATCACCGTGGTGGGTAAAGCATGGGGCGTGAAACAAACCTGCTGTACCGA  
TTGGTGATGGTGCAGATGATCATCGGCGCGCTGATTCTGGTTGCTATTTTGATTACTTCA  
CTCTTCTAGTCAGACGCTCGTTGCGGCCGTTGAGAGAAGTTGAAGAGACCGCCACCAGG  
ATTGCGGGCGGTGATTTGGATCGACGTGTCCCGCAGTGGCCAATGACCACAGAAGTCGGA  
CAGCTGTGGAATGCCCTCAATATCATGTTGGAGCAGCTCCAAGCCTCAATTCTGACCGCC  
CAGCAAAAAGAAGCTCAGATGCGCCGATTGCTTGGCGATGCCCTCCACGAGCTCCGCACA  
CCACTGACCTCTGTGAAGGGCTTACCGAGCTGTATTCATCAGGTGCAACAGATGATGCC  
AACTGGGTGATGTCCAAGATCGGTGGCGAAGCCCAACGCATGAGTGTGCTTGTGGAAGAC  
CTCCTGTCACTGACGCGTGCCGAAGGCCAGCAATGGAGAAGCACCGCGTTGACGTGCTG  
GAACTCGCCTTGGCAGTACGCGGATCCATGCGAGCAGCCTGGCCAGATCGCACAGTCAAT  
GTATCCAACAAAGCTGAGTCCATTCCGGTTGTCAAAGGCGACCCAACTCGCCTCCACCAA  
GTGCTTACCAACCTGGTTGCCAACGGAATAACACGGCGGACCGGACGCGGAAGTCAGC  
ATTGAGATCAACACCGATGGACAAAACGTGAGGATTCTCGTGGCAGACAACGGTGTGCGA  
ATGCTGAAGAAGATGCTCAGCATATCTTCGAGCGTTTCTACCGCGCCGATTCTCCCGC  
TCACGCGCATCCGGCGGATCGGGCCTCGGCCTTGCGATCACGAAATCCCTGGTTCGAAGGC  
CACGGCGGCACAGTACCGTTCGACAGCGTGCAAGGCGAAGGCACGGTGTTCACGATCACC  
TTGCCGGCGGTTTCT

>RXA00631-downstream

TAAAGGCATCAAGGGCCGAAAA

>RXA00637-upstream

CCGATGGCACTTTCCGTACCTGGAAGGTAGTTGCCCGCGGCAGAAACAATTAGGGAAACC  
TCTTGACCTTCACGCGACGTCAAGGATTTAACTAACAGTC

>RXA00637

ATGACAGATCGAACCATTTGGCGAGGCTGCTGAACTACTCGGTGTCACCACCCGCACACTG  
CGGCATTGGGACAGCATCGGGTTGCTTCAACCGAGCTGGCGAACCACAACGGATTATCGC  
CTTTACACAGAAGACGATGTCGAGCGCGCCCTGCAGATTCTTATTTACAGGGCCGCGGA  
ATCGGGTTGAAGGATATTGCGGAGGTGCTTGATCAGCCGGATTTCGGCCAATCAGCACCTG  
CGCCGCCAGCGGGAACCTCTAGTGAACAGATCGGTCAGCTGCATCGGATGGTCCGGGCA  
GTAGATGAAATCCTTGGAAAGGATGCGATTAGCGTGAAAGGAAAAGATTGAGATCTTCGGC  
GAGGATCTGCCCAAGTACCAAGAGGAGGCTTTCCAGCGCTGGGGCGACACCCCGGAGTGG  
AAAGAATCCCAAAAGATCCAGGAGAAGATGACCAAGGAGGATTTTCAGAGGGCGAAAGAT  
GAACATGAGGGGTTTCGTCGAAAAGCTTATCGACGCCTCCCTGCGCGGCATCGCGCCCGGC  
TCTGCAGAGGGCAATGAGCTAGCGCTTGCGCACCCGCGCAAGCATCGGTTCAGTGGTACACC  
GTGAGTGCAAACAAGCAAGTAATTTTGCTCGGATGTACGTGGAAGACGAGCGTTTAAAC  
GAACTTACAAAGGACACGCCTCATATCTTTTAACACTTATTGAAGCATTTGGCGAGGTA  
GAAGGCGTGACTTGGAGAATGTGGAGTGGGAA

>RXA00637-downstream

TAATCCCAATTTCAACTCTTTCA

>RXA00646-upstream

AATGCAATCGGAACGGTTAACGCCAAGTGATCTGGTGGGATGTAGGTACCGTCAGGTCCA  
GCGCATAAATTTCCCAGAAATCTCTCCTTTACCTGCAACA

>RXA00646

ATGCAGCGCAGGGCCCGCCGTGAGGTTGGGTTGACGGAAGTTTGGATCGTCTCCCAGAG  
CAGCCCCAAAAGCGGGGCCGAATTCCTTTCACCAGGGCAGATCTAGACAATGACGCTGAA  
TTGGCGGAGTTTGAACCCCTCGAAGCAATTGCAGCCGGCGACACCTTGATTACCGCGCA  
GTGTTACGCGGACCCCTCGAAGGGGTGGCATGGGAAGTGCAAGTGGATGTCTTGGTGC GC  
AACCTTGATGGAAGCTACATGCCCCGTGATGGTGAGCAATCACCGTGTGCCCCGTCCGGAT  
CCGCACAAAATATGCAGGGCATTGCCGTCACCCGCCTCGGTTTGGGTGAGCCGCTAGAG  
CTCAAGGCAACGCTGCGCCACCACACGATCGATGGCTATCGCCTCACCCCTCGCGTTGATG  
GGTTTGGAGGAAGCTGGAGCA

>RXA00647-upstream

TGCATTCTTCCCACAATGACATGAGCTTATTGCAACATCGTGGGTAAAGTTGAATCGAGA  
AGTCGAGAAATAACCGACCGATGAAAGAGTTGAGACGATA

>RXA00647

ATGGGCATCTTCGAAGCCATCCGAGCCGCACGCGCAAGACCAAAGCTGAGATCAAAGCA  
GCCGAGGCAAAAGTAAAACTGAGGCGAAAAACAAAGCAAAGCTAGATCTCAAGCGCGAG  
AAGCTTCTTGTCCAGCAGGAAAAAATCTGCTCAAGGTGGAAGAAAAGGGCCTGAAGAAG  
CGCAACAAGCATGAGCTGAAGATGGCCAAAAATATCCTTGAGCAAAAGCGCCAAGGACGC  
CTAAACAAAGACAAGGTGAAGCGCTGGGCTGGCACCGCACGTGTGCTCACTCCACTACTG  
CTGCCATTATTTATCGACTCTCCACCGAAGCACGCGATCAGGTTGTTAAGGGACGTGCC  
CGTCGTGCAGGTGTACCGCGGAGCAGCTTAGCCAATTCGCAGGTCACGCAGCAGCGCTG  
AAGGCTCGTATTCAAGGTGTTGCGGAAACCGCAAAGAATCCAGCCTCCCTGCTGGCTTT  
GTACGCGATGTTGAAGAGCGTCTCAATGAGCTCGAGGCTGCTGCGAATAACTCTGAGTTC  
ATGTCTCCACAGCAGAGGAACCGTGCGCACCGATCGATCAGTCGTGATCTGAACCAGGTG  
TCAGATCAGATTCAGGATCGACTACTGGACAAG

>RXA00647-downstream

TAGCTGCTGGTTCGAGTCGCTGCC

>RXA00649-upstream

GTATTTGATCTGTGGTGTGGCTGATTCGGGAGGACTCGATGACATTATGTGTATGGTACA  
CATT'TTGTGCAAGATGCAATAGCTGGCAAAC'TGGAGAGCC

>RXA00649

ATGAGCACCAGCCCCATCGCGGCCCTTGAATACGAATCCACCATCTTCGCCCCGTCACCGG  
AATCAATACACCGGCCAAGCAGGTACGAATGCTGGCGTCCTCGATTCCAGCGGCTACAAC  
CTACTCACGCTGCTCCAGTTACGTGGCCCCCTCCACCATCGGCGAACTCAGCGCCATCACC  
GGCCTAGACGCATCTACCCTTAACCGTCAGACAAAAGCCCTACTAACCAGGATTTGTC  
GAACGCATCCCAGATCCCGACGGTGAATCGCTCGGAAATTCCACCCACCGACCTCGGC  
AATGAAC'TGCTCAACGAGGAACGCACATCCAGCCAAGAAAAATATGCCGAGTTACTTTCA  
GACTGGCCCCGAAGAGGATCTACGCACCTTCGTCAAAC'TTCTTGAAAACTAAATAAGCC  
GTGGAGACACGCGTCGGAAAGCATTGGCCGCGCCCC

>RXA00649-downstream

TGACTCAGCCCAAGCCAGAGCCC

>RXA00652-upstream

GCGATAGCTCATCGCGCCCGGTTGATTCCCCTTCTTCACAAGGGTTTCAACATCGAGCTC  
ATTGCGTCCGGTTTCCGACACACGATCTAGGCTTGACTGC

>RXA00652

ATGCGTCGTACATTACCTACTATCCTCGCTGCTTCCATCATGCTCACCGCTTGTACCCCG  
GCGGAACCTGAAGCAACCCAGAGACCACCACCGAGGCAGCCCCGGAAGTAATTACTGAC  
GGCCTTCCCATCGACGCGATGCCCGCGGTGCAACGCACCGCACAAACCGCATGCCCTAC  
CTGGGCACCGACTGGGTGCGCCGATACCAACGGCCAGCGCTCACGGGTACGGCACAGAC  
GAACGCTTTTCGACGCCCTCCTGCGTTT'TTACTCCTACCCCGAAGAACCACAAC'TCACG  
GTGATTGTCCGCGATATGGCCACCACGGATGACGCTATCGCGGTAGTGGATTGGGCAGCC  
CCCATCGATTCCACTGAGCCCCGTGAGGAACCCGAGGGTGGTCCGGTGGCCGCCGAGGT  
GGAAACGATACTTCAGGCGCACTCTACGCGGTTCAAACCGCCCCACCGCGGTTCATCGTG  
TTCACCAATCAGGATCAATCCCTCAAAGCGCAGTTAATCGCTGAGGAAGTAATCCAGAAT  
CTTGGTCTC

>RXA00652-downstream

TAACTATTAGAAGGCCACATCGT

>RXA00653-upstream

GTTGAGATTGCGCTAACAAAGATTTTGGACGAAAACAGTAACGATGACAGCCACGTTAAG  
CGCGGAATCTTCTCGCAATGGTAAAAAGCCGCGGCCTCGA

>RXA00653

GTGAGTGT'TTCCAGGTTGTTGGTGAAATCTTGCTCACCGTAGGCATTTTGGCCTTGTTA  
TTTCGCATACTATGAGGCCTATTGGACCAACGTGGAATCTGGGAAATTACAAGAATCGGCT  
GGTCAAAGCTTGATGAAGACTGGAATGAAGCTCGGGTGAATCCTCGACAAAAGCTCACC  
CCGGAAC'TTGGTGAGGCATTTGCCCCGATGTATGTTCCAGCTTTCGGCTCTGACTTCAAC  
TTCGCAGTGATTGAAGGAACCGATGAGGAAGACCTTCTTGCCGGTCC'TGGCCGTTATGTG  
GATTCCCAAATGCCTGGTGAAGCCGGAAC'TTTCAGTGGCAGGCCACCGAGTGGGCAAG  
GGTGCGCCATTCAATGATCTAGGAAACCTGGAAGTCTGCGATGCGATCGTGGTGGAGACT  
TACAATTCTGGGATGTGTACCGCGTGATGCCGATGTCCACCAACGGTGCAGATCGTGCA  
GCAGAAGCTGCGGATTGCTTCAACGAAAACAGGTGAGCCGCATGGCTGAAGGTGACTAT  
GTGAATGTGTCCGGACGAAGCATCACCCTCCGGATCGCATCGATGCCACCTACCCACA  
CCGGGCGTCTTCGACACTGCAGTGCCTGAAGGATCAGAAGCTCTGCTTACCTTGACCACG  
TGTCACCCGAGTTCTCCAACGCTGAGCGCATGATTGTGCACGCAATGTTGGTGGGAAGAA  
ATCGATAAATCAAGTGGCGAACGCCCTGCAGCTT'TGGAGGAAAAAC

>RXA00653-downstream

TAAATGTATTCACTTCTGTGGCA

>RXA00654-upstream



CAGCAATAGCGATTATTGCTTGATTGTGTGTTTTTAGATCTTCGGTTCTCTTCACTCAAC  
TGCTGTGAAGTGCCACCTGTTTGGAAAGGCGAACACGATA

>RXA00654

GTGCTCGATATTTTGATTACCCGGTGTCTGGAGTGATGAAGCTGTGGCACCTGCTTCTT  
CACAACTTGCGGGTTTGGACGATTCACCTGGCGTGGTTCTTTTCCCTTTTCGGCCTTGTC  
ATCACGATCCGTGCAATTATCGCGCCTTTCACCTGGCAGATGTATAAGTCGGGCCGCACT  
GCCGCACATATTCGTCTCACCGCGCTGCGCTCCGGGAAGAATACAAGGGAAAAGTACGAT  
GAAGCGTCCATTTCGGGAGTTGCAGAAGCGCCAGAATGATTTGAATAAGGAATACGGCATT  
AACCCGCTGGCAGGTTGTGTGCCTGGGCTGATCCAGATACCGATTGTCCTTGGTCTTTAC  
TGGGCACTTCTCCGCATGGCTCGCCCTGAAGGTGGTTTGGAAAATCCCGTCTTCCAGTCG  
ATCGGCTTCCCTAACTCCTGAGGAAGTGGAATCTTTCCCTCGCTGGTCGCGTGAGCAATGTG  
CCTCTGCCCGCTTATGTTTCGATGCCCCACTGAGCAGCTAAAATATTTGAGCACCACGCAG  
GCGGAAGTTCTTAGTTTCGTTTGGCACTGTTTCATCACAGCCGCAATCCTCACCGCAATC  
AACATGGCGATGTCCATGTACCGCAGCTTCCAAACCAACGATTACGCATCCGGATTCTCT  
AACGGCATGCTGAAGTTCATGATCGTGATGTCGATCCTCGCGCCGATCTTCCCCTGTCC  
CTTGGCCTCACAGGACCATTCCCCACAGCAATCGCACTCTATTGGGTCAGCAACAACCTG  
TGGACGCTCCTCCAAACAATCATCATGATGGTCATTTTGAACGCAAAATACCCACTTACC  
GACGATTTCAAAGTGACCACTAGAGCAGCGCGACATCTACCGCGCAAAACAAAAAGAA  
AAGCGCATCTTCTGTGGACACGACGCAAAACCGCGCCCTGATGATTCTCACCCCATGG  
AACGCCTCAACGCTTCACGCAACAAACGTGGAATCACCAAAACCCGTACTGCCGAAATC  
AACGAAGCAAAACAGGCCCGCAAAAGAAATCGCGAACAAGAGGCGCGAAACGCAACGTGAA  
ATGAACCGCGCCGCCATGCAGCGCTTAAAGCAGCGTCGCGCTGAGGTAAAGCTAAAAAG  
AAGGGCTTATCGACGCTCCCCAACGAAGATACCCCTTCGGAAAATGAAGAACTAAA  
TTGAGTAGTCCGCAGGTGGAGCCGACAACACTGCCGAGCCAAATCGCGAGCCGTCTCAA  
GAGGAC

>RXA00654-downstream

TGATGTTGTGGACCAATCGAGAT

>RXA00656-upstream

CTTTTAATAACAATACAATAATTGGAATAGGTGCACACCTTTGGAGCGGAGCCGG  
TTAAAATTGGCAGCATTCACCGAAAAGAAAGGAGAACCAC

>RXA00656

ATGCTTGCCCTAGGTTGGATTACATGGATCATTATTGGTGGTCTAGCTGGTTGGATTGCC  
TCCAAGATTAAAGGCACTGATGCTCAGCAAGGAATTTTGCTGAACATAGTCGTCCGGTATT  
ATCGGTGGTTTGTAGGCGGCTGGCTGCTTGAATCTTCGGAGTGGATGTTGCCGGTGGC  
GGCTTGATCTTCAGCTTCATCATGTCTGATTGGTGTCTCATTTTGCTGACGATCGTG  
CAGTTCTTCACTCGGAAGAAG

>RXA00656-downstream

TAATCTGCTTTAAATCCGTAGGG

>RXA00657-upstream

GATCATGAGTTTCCACGAACTGTAACGCAGGATTACCAATCAATGAAAGGTGACCGAC

>RXA00657

ATGAGCACTGAAGACATTGTCGTCGTAGCAGTAGATGGCTCGGACGCCTCAAAACAAGCT  
GTTTCGGTGGGCTGCAAAATACCGCCAACAAACGTGGCATTCCACTTCGCTTGGCTTCCAGC  
TACACCATGCCTCAGTTCCTCTACGCAGAGGGAATGGTTCCACCACAAGAGCTTTTCGAT  
GACCTCCAGGCCGAAGCCCTGGAAAAGATTAAACGAAGCCCGTGACATCGCCCATGAGGTA  
GCGCCAGAAATCAAGATCGGGCACACCATCGCTGAAGGCAGTCCCATCGACATGCTGTTG  
GAAATGTCTCCCGATGCCACAATGATCGTCATGGGTTCCCGCGGACTCGGCGGACTCTCC  
GGAATGGTCATGGGCTCCGTCCTCCGGTGCAGTGGTCAGCCACGCAAAGTGTCCAGTCGTT  
GTTGTCCGTGAAGACAGCGCAGTCAACGAAGACAGCAAGTACGGCCAGTCGTGCTCGGT  
GTGGATGGCTCCGAAGTCTCCCAACAGGCAACCGAATACGCATTTGCGGAAGCTGAAGCT  
CGTGGCGCCGAACCTCGTTGCAGTTCACACCTGGATGGACATGCAGGTACAGGCATCACTT  
GCAGGTCTTGCAGCTGCTCAACAGCAGTGGGATGAAGTGGAACGTGAGCAAAACCGACATG

CTGATCGAACGCCTCGCACCCTGGTGGAAAAGTACCCAAGTGTAACCGTCAAGAAGATC  
ATCACCCGTGACCGCCAGTTCGCGCACTTGCAGAAGCATCTGAAAACGCGCAGCTCCTA  
GTCGTTGGTTCCCATGGTCGTGGCGGATTTAAGGGCATGCTCCTTGGCTCCACCTCCCGC  
GCACTGCTGCAATCCGCACCGTGCCCAATGATGGTGGTTTCGCCACCTGAGAAGATTAAG  
AAG

>RXA00657-downstream  
TAGTTTCTTTTAAGTTTCGATGC

>RXA00661-upstream  
CGGATGCAAGAGAACCGTGGTTTCGCTGATTTTTGGCGAACC CGGAATTAAGGCCCCGAG  
GATTACATGCTTTTAAATCCTTTGAAAAGGGGACAAGATC

>RXA00661  
ATGAATCCTATAACCGAATTATTAGACGCAACACTATGGATCGGCGGAGTTCCGATTCTG  
TGGCGCGAAATCATCGGCAACGTTTTCGGATTATTTAGCGCGTGGGCAGGAATGCGACGC  
ATCGTGTGGGCATGGCCCATCGGCATCATAGGCAACGCGCTGCTGTTACAGTATTTATG  
GGCGGCCCTTTTCCACACTCCACAAAACCTCGATCTCTACGGCCAAGCGGTCGCCAGATC  
ATGTTTCATCATCGTCAGTGGTTATGGCTGGTACCAATGGTTCGGCCGCAAAAACGTCGCGCA  
CTCACCCAGAAAATGCAGTAGCAGTGGTTCTTCGCTGGGCAAGCACCAAAGAAGCGGCC  
GGCATTTGTGATTGCGGCGGTTGTGGGAACACTCAGCTTTGCCTGGATTTCCTCAAGCACT  
GGCTCCTGGGGGCCATGGGCGGACGCGTGGATTTCGTCGGCTCAATCCTGGCTACCTAC  
GGAATGGCTCGCGGATGGACAGAGTTCTGGCTGATCTGGATCGCCGTCGACATAGTTGGC  
GTTCTCTACTTTTACTGCTGGCTACTACCCATCCGCGGTGCTTTACCTGGTGTACGGT  
GCGTTTGTGAGCTGGGGATTGTCTGTGGCTGCGGGTGCAAAAAGCAGACAAGGCTCGT  
GCGCTGGAAGCTCAGGAGTCTGTGACAGTC

>RXA00661-downstream  
TGAAAAGCGTTTACTAAATAGAA

>RXA00662-upstream  
CCCTCATCATAGTTTTAAATCTGGGGCAGAGGCGGAATTTAAACACCTCTGATACAGCG  
TTTACTGGCTATAGTGTGCGCGTGCCAAATCGAGTTCT

>RXA00662  
GTGTCAACCATTCGCTGAATCGTCTAGCCGTTATCGCTGCCATCATTTGGTGTGCGGTACC  
GGGCTGTTTGTGCTGCACTGAACCTGCTGCGCTGGAGCGTTTAGTTTATGGC  
GCTGACCATTTGCATAATTACAATCCGGTGGCCAATGTGTGCGCACTTCGCCTGTCCATC  
ACGGTGATTGTGCTTAGCGTGGTGGCCTCTGGGCGTGGTTTTTTGTGCACCGCACGGGG  
CCGAAAGAGGTTTCGATTGTGGGTGCGATCCGGGGCGAGAAGATGCCGATTTTGGAGACC  
ATAGCGTCCGCATTTTTCAGGTCACCACGGTTGCTGCGGGTGCGCCGGTGGGTGCAGAG  
AACGCTCCACGTATTGCTGGAGCCTTGGTGGGAGAGCGGTTTAGTCGGTGGTTGCAGCTC  
GATATTGATGCAAGCGCATCTTGGTGGCCTCTGCCGCGGGAGCTGGTTTGGGAGCAAGC  
TTCCACCTTCCCTAGCAGGCGTGCTGTTTGCCCTTGAGGTCTTACTGGTTGAGGCCTCC  
ACTCGGACCGTGGTTATCGCAATTATCACCACGACCGCCGCGCTTGCCACCACTGGATTT  
TTCGTGCAAACCCAGATGTGTTTACGCACTGTCCCGCTGACGGAAGCCCATGGATGCTG  
CTTGCCGCGATGGTCACCGGAGTAGTCGCCGGCATGTGCGGGCACTGGTTTTTCAGCGCG  
GCGCACAAAATGGCGCAGGCCTCGCCCAAGGGTGTGAAGATTTTGTGGCAGATGCCGTTG  
GGTTTTCTGTGGTATCGCTGCGGTGATTTATTTCTTCCCGAAACCCGCGGAATCCCGT  
TGGCTTGCCGATTCCATGCTCGGCGATGGCCTGATCCTCAGCACCATTTTATTGGTACTT  
GTTCTGCGCACCGCCATGTTTTTGTCTGCGCTTCCGCGTGGGCATGGTCGGCGGTAACCTG  
ATCCCCGCAATTCGCACTCGGATCCATGGTCGGTGGGGTAGTGGGTGCTGTATTGGAACCC  
ATCACTAACGTCCCGATCGCCGCTTTTTCGCTGCTTGGCGCCGCGCATTTTGTCCACC  
ACCATGGCAGCGCCACTGTTTCGGGCTCATCGCCGAGTGGAATTCACCGACATGGAAGCC  
CAAGGCTACCTTCCGATTTTCTTCGAGTAGCCTCCGCGGTCTCGCCGTGCGCGTGTGG  
TCTGTATCGCCAAGCACGAGCTCCGCGCCATCCCGATCACGTACGCGAGCTGGACGGGC  
GAGCTTAAA

>RXA00662-downstream

TAAGCTTGTGCGACGCCTCCCTCC

>RXA00666-upstream

AGTGGTGAATGCTGGATAAGTTTAAACATGTCTAGTGTAGTCGGGGAAGGCCAAAACC  
ACGATTGAGCGTGCTTGATCTCGTCGCGCTGAGTGAAGGG

>RXA00666

ATGACGGCCGGCGAGGCCATTGCACACAGTGTTCGCGCTGCGCAGATCGCCGAAGAGCAC  
AATTATGCGCGTTTCTGGGTGGCGGAGCACCACAACCTCGGAAGGCTTGGCATCTTCCGCG  
ACGACGCTGCTCATGGGTCATATTGCAGGCCACACTTCACGCATTTCGCGTTGGCTCCGGT  
GGCATCATGATGCCCCAACCACTCCGCGCTGCACGTCGCCGAAGAACTCGGCACCCCTGAG  
GCCATTTACCCCGGCCGCATCGAGGCCGGCCTAGGGCGCGCACCAGGAACCGACCCCATG  
ACGGCGCGGGAATTGGGTTCGGGCAAGTTCGCTTGTGCGACGACGTCTCTCCACAATCGTC  
TCCCTCCAGAATTATTGGACACCCCC

>RXA00667-upstream

GGCATCAGTGTGTTGAAGGGAAAAGCAGGTCAAACAAGGTGCGGCTGATTTGAGCGATCAC  
AGCACCGAGATCTGTGCTGAAGAATTCAATGATTGGGTTG

>RXA00667

ATGATTGCGTTGAAGTCCATGTCTAACAGGGTAGTACAAAAGCCAAAAATGAAAGCGCCG  
CTACCCATCCGCGACGGCTCAACCCTTCCCGTGTGCGCTTGGCGCTCGACGCGGCGCCG  
ATCCGCGCCATCGATTTTGTGTAATACCTCATTTCCACGCAGCGCCACCGCAATCCGGCC  
GACAACGCCGAAGCGCTTCAAGCGCGTTTCGACGCCGACCTTGTGTCAACCCTACGGC  
GAGCCCTACGCCCCGACACCATGGTTTCAGCCCGACGACGACATTGTTTCTACCGCATG  
CCCGCCGCGGAACGGCCGATCCCTTACAAAATTCATGTCATTACGAAGACGATGACATC  
CTCGTCATTGACAAGCCACCTACCTAGCAACCATGCCTCGTGGCCGCCACATCACCAGAA  
ACCGCTCTGGTGAAAAATGCGTGTGCTGACTGGAAACAACGATCTCACCAGCTCACCAGC  
CTCGATCGCCTGACTTCCGGTGTGTTAGTCATGGTGAAAAAACGAACTCCGTGGCGCT  
TACCAAACCTTGTGTTGCCCCAGCTGAGGCGTCCAAAACCTATGAG

>RXA00668-upstream

CTAAACTCGTCTCTCGTATCTTTCAGTCATTTATGTCTGATAAGCAGGCGCGTGCGCCAC  
ACAATTGGCACAATCACAAGAAAGTGAAGTGGGAACCTAG

>RXA00668

ATGCTGACGACACTATGGATTGCGGTGTTGGTATTTACCGTTCCAGGATTGGTCGTCTCG  
TGGGTTTCTGGCCTTAAAGTGCCCTGGGCTATCGCAGCCTCCATCCCAGCCACCTTCGGT  
ATTTACGGCCTGTCCGCCGTGGTTGCTGGGCTTGTGGGAGATGCGTTTTGATCTCCATTCT  
GTAGTTATTTCCACATTGGTTTTTCGCTGCGGTTGCTTTGGTATGGCGCTTGTTTTTTGTC  
GGTGGTTGGCTTGTACGTCCGGCTAAAGCACGTATCCGCGAGGACGCTCGCGGATGAA  
GAGCGGGCAGAAAATGCTGAGGTATCTGCAGGGGAGCCTGCCGAATCGAGCACAACGAA  
GCAGCCGAATCTGAATCTGAAACCTCGGAGCGTCGCGGAATCTGGCGCGTGATCTTTGAT  
TACATGCGCGACGGTGGCATCTTGGATCACCGTTGGCTGCTGCCTGCCGAGGTGCTATC  
ACTGGTGCCTGGCTGATCATTGATCGTGCCGTTGATCTGCTCTTGAGCACCGAGCATGGT  
TTGGGCGATATCGTCCAAGGCTGGGATGTCCATTGGCATGCTTCGACTGTCCGTTTATA  
GATGAGACCGGCATTGCGTCATCCACGATGATGGGGCAGCTGCGCAATATTGAAACGCAG  
CAAGATCTGTTCTACCCAAGCGCATGGCATGCTGGTGCATGGGTGCTGTTCGGATGTCCGA  
AATCTGACGATTGTTGAAGCCACCAACCTCACTGGCATTGTGCTGTCCGATTGTTGCTG  
CCGTTAGCTGTT

>RXA00674

ATCTTTGCCGACGATTGGCGTTTCATGGGTATGTTCCAGCTGCATCCAGCCCCATCCACC  
ATCGTGATCATGGTGTGCTGCTGGTGGCTGCTCAAACCTCGTGGTGGTTCCAAGCCAG  
AAAGTGAAGGGCTGGAAGGCGGGCATCGGTATCCGTTTGAAGGATGTCGGCATCCTGGCC  
ATCACGGGCATCATCGGTGTGCTCTTCATGCTGCCTCAGGTGATTTACAGGTTCCGAACAA  
ACCGAAGATGTGCTGTCAATTCTGCTGAGGAACAAGTACCCGCGAGCGAGTCTGGTTG  
GTGCTATTTTTTCATGGAGACCCGCCATGTTGATTTCTTCGGAAATATTGACATCGTCCCA

GTGCTGGTATTCGCAGCAATCGGTGGCGTGGTTGCTTTGGTGTGGCGCGGAACTTGTGG  
GCGCCGGTGTCTTACTTCGCCAGCGTTGCGTTGACCGCTAACTCGCTGAAGCCTTTTGAA  
GAGCCGTGGGGTGATTGGCTCAACATCGTGGGCGGTCTGCATTACTCCACAGGACACCGT  
TTGATCATGCCTGTGCCATGTTCACTTTTGGCTGCCGCAGGTATCGGCGCTGCCGCAGTG  
ATCCGTTTGATCTGCTTGGGACCAATAAAGAAGTTCACCACGTGTTTCCGGTGTGTTTCT  
GTGGTGATGGCTCTTGTGTGGCTGTGCCATTCGAGACTTGGGCGAAGGATTTTGTAGAG  
GAAGGATCCGAAACCACAATCCTTGCGCCA

>RXA00676-upstream

GGTTTGCACCTCCCCGGCGTGCCGCCAGGGGAGGAGGCGATAAACTTTTTTACCTTTC  
GAATATCAAAATCATAAAACAGCCTTATATACTTCAACGT

>RXA00676

ATGGCGAAGAATTCTCGAATCCGATACAGCGCGTCAATCAAGCGTGCCGCAGCTGCAATC  
CTCACCGCAGCTGCTACCTCAGTCGCGTTGATCGCTGTGCCAGCAACTGCTTCAGCACAG  
GACCTCGCAACCGGCAGCTCCAGATCCAGACTGATGCTCGTGAAGGTGCGTGGGCAACC  
CGCAACACCATCCAAGACCAACTTGCTCCATTGGGGCCAGCAGCCCTCCAGTCCGCGCA  
GCGGTAGACAATGCCATCAACGGCATGTTCCAGGACTTGTGATGAAAAGGTTGCAGCA  
GAGCAGGAAGCTGCACGCGCAGAAGCTGAGCGCGAAGCAGCAGCTGCACGTGAAGCAGAA  
GCAGCCCGCGTAGCCGCAGAAGAAGCCGCACGCTTTGACCGCGGCTCTTGCCAGCAATC  
GCTGATGTCTGCGTGGACATTGATGGTGGACGTACCTGGCTGCAGGAAAACGGTCAGGTC  
ACCTACGGTGCAGTCCCAGTTTCTCCGGCGGAGTTGGCCAGGAAACCCCTCGCGGAACG  
TTCTACATCAACCGCAAGGTCAAGGATGAAATCTCTTACGAGTTCCGTAACGCCCCAATG  
CCGTACGCCATGTACTTCACTTACAACGGCCACGCATTCCACCAGGGCAATGTTGCGACT  
ACTTCCGCTGGTTGTGTTTCGCCTAAACACTCAAGATGCCATCTACTACTTCAACAACGTT  
GGCATCGGCGACATGGTGTACATCTAC

>RXA00676-downstream

TAAAACTCACCGTTGCTAGCAGG

>RXA00678-upstream

TGCGCAGTGCACTTTCCAGGAACCAAAATATCCCCGCCGACCTTGCTGCAGATATTTTCGC  
AGCCGCTGAAAAAACTAGCCGTTGACCTGGAGGTTACCCG

>RXA00678

ATGACTCGCAGTAATTTACCCGCTTGGGAGCAAGCAGACCCCAGCGTCCACGCCCTCTGAT  
CCCCGCGCCATCACTTTTGCAGGAGGATTTTGGGATTTCGTCCCATCCCCGGCCGTAGGTCCA  
ATTGATACCACCGCTATCTGTGCAACACCTTCAAATGGATTTGAGCAATTATGGAAAGCC  
ATTGAGCCGGAACCCGCAACCCGCGCCAACGACATTTCATCTTCCCATCGTCGTGGCGTAC  
GCTGAACGTCTCTGCGACGCTTACCCACTGGCAGATAGAGAATTGGTTCTCGTAGCCGCA  
ATCCTCCACGACACGGGCTGGGCACATGTCGATGAGAGCCGAATCATCTCCGAAGGATTC  
TCCGGAACCTGGCGCAAAGCAGCAATCCGCTTCGAACACGAAACAGAAGGCTGCACTGTG  
GCCCCGCCGAGTGCTTCCATCCCTCGGATATACTGTGATTTTGTGCGAGCATGTCTGCGAC  
ATCATCGACGGACACGACACCCGCCAAGTGGCCTACTACTAGAAAGACGCTCTTGTTCGC  
GATTGCGACCGACTCTGGCGTTTCGACCGCGCCGGGATCACGGCTTCTAGCTCATGGTTC  
GGGATGCCAGTCTCAGATTATGTCGACCGCCTGCACAGGGAAATCCTCCCAGAATTAATC  
ACCGAAGCTGCACACCAGATGGCTACTGCAGACCTCAATCGTGCAAAGGCCCTGTTAAGA  
ACGGATGCGATCCGA

>RXA00678-downstream

TGAATGCTGCAACCAGGCGTGCT

>RXA00691-upstream

TGCAGCTGCAGTCGCACTATGGATTGTTCTTGCCATATCGCCATGGGTTCCCTTCTGCGCA  
CGCCTTGACCACGCCTTGTGAAGACGACCAAGTGACAGTG

>RXA00691

ATGGTTGAGGGCAACACCATCGGCTGTGCTGACGCCGGCGGAAATGGCTATCAAACGCTT

CTTGATGCCGGATTTGATGTGGAAACCACCGTTCAGTTTCCAGAATTCCTGTGCCGAATC  
AATGATTTCCCAGGTCTGTATGTGGACGATTGCATGACCGCATCACCTGCTGAAGCTTAT  
TGGTCTTATTGGCATGCTCCCCCTCGGCGGAGATGAATGGGAATACAGCAACCTTGGAGCT  
TTCTCTACTACCCCAAACCCGGCACTGTTGAAGCGTGGTATTGGGGAGATACTGATCGT  
CCCGGCGCGATCCCGGTGAGTAAATCTCAGGCGGAGTTGGGGTTAGACTCCGCGGATCCG  
GATTACAAAATTGATTTTGTATCCAAATGATTTTCATCACCACAACCCCAACCTCCGAGTCC  
CCTATCGCCGATTTAGGGGGGTGACGAAGAGCCCACTGAAACTACTGAAGCTCCTATCGCA  
GGGGCTGGAGCTGGTTTCGGCAAGAGGACAAGCAGCTGAACCCACTGTTGAGGTAAACCCCT  
GAGAACCCTAATGAGGTATTGGTGTATCAGGATTCTGAAGGAACTCGATTACTAAAGGT  
CAGTACGAGAACTTGGTTGCTGCAGCAGCCGCTAAGACCACTGCTGCTGTCCAAGCCCCA  
GCTGGGGCTGGTGAAGCAAATAGCCAACCGCAGGCAACAGCGGTGGCAGAAGCTCCTGAA  
GTTGATCCGATGACCACGCAGGTTCTTATGGCGCCTGCGGGCCAAGATGGAGACGTCATG  
GCTGAGGGTTTCGACGCAGCAGACGTACGCCACAGGCACGGTGGATTCTTCTGCTCAGGGA  
TGGATCATTTGACTCACACTGGCTGTCAATTTCCCTTGGTTTCAGCGTCTGCTGTGGCGGCG  
TGGGCGATTCTGTCGTTTCAGAGGTCCAGGGT

>RXA00691-downstream  
TAAAGCTTCGTGAAATGGATTGA

>RXA00692-upstream  
CCTTAAAGCGGGGTCAGAACATTTCTCCAATTCATTTTAAGGACATGTTTTTCATGGCTCA  
TCTACGTGGGAAGAGAACCATTTCGCTGGTCTGCTGCAACC

>RXA00692  
GTGGCTTTAGCAACCGGTGTTTCCCTGTTGGCTCCACAGGTTCGTTGCTGCACAGGATGCA  
TCATCGGATATTCAATTAGCTACCCAAATTCATCGAAAAAGAATTTGCAACGAATGGCCTC  
ATCCCTGGGCCTGTAGGTACTCCAGATATTGGGCTCAATCAGGATCTGTTGCTGTCCCTA  
AATGCGCTTGCCCCCTGATTCTCCAGAGATCGACGCTGCATATGCTGCAATTGCTCCGGAG  
CTCGAGGGCTATGTCTCAGTTTCTGACTACATCTTCAGCGATCGTCTAGCCAAGACCGTA  
GCTTTCCAAGATGCCCTCGGCGTCAGAGATGCTGATTTTATCGCGCAACTTGTCAGCGCT  
GTTCAAGAAAACGGTCAGATCAAAAACCTTAGATAATGGTGAAGCCACAACCTGCAATTAAT  
AACTTCAGCCAGGCCTGGGGCGTTCTAGCTCTGCACCGCGTCGGTGAAACCGAAGCAGCC  
GAGCGCGCAACAGAATTCCTTAAAACTCAAGTGTGCTCCGACGGTGGTGTCCAATTAGCC  
TCAGCAATCGAACCTACATGCAAAACCACGGATTCCGATGTCACTGCAATGGCTGCACAG  
GCTTTGACTCTGGCAAATGGTGCAGGATCCAACCACACAAGCCACTCTCGATTACCTC  
GTCACCACGATGGATGAGACCGGTGGTGTCAAAAATACTTGGACCGGTGTGAATTCCAAC  
TCCACGGGAATTGTCCGATCCGCTTTTGTCTTTGCGGGCGATGAGGAAAACCTACCTCAAG  
GCTCGTGAATACCTGGCATCTGTTCAATTTGGCGAAGATGCAGACCCATCGATTACGGGT  
GGCTTTGCTTTACCGTGACGTAAGGCTAAGGAAACCAACACTGCGATTAGCGATCAGATTGCA  
CGCGCAACTGGCCAAGCAGCATTAGGTTTTCAGGCGGTAACCTACGCCAACGATAAACTG  
ATCACCATTGCGAACCCAGTAGATCCAACCTCAGATCCAGAAATTCCAACTCCCCCAGCT  
GATTACAGAGGGATCCACCGGTGGAATTGGCGGCGCTGGAATTATCATCGCCATCTTGGCC  
ATCCTTGCCGCCATCGCTGGTGTATGGGACCAATGATGGCTAACCTGCAGTTT

>RXA00692-downstream  
TAACATCTGAGAGAAGTACAGTG

>RXA00693-upstream  
TCCATCAGCCCTCCCCCGGTGCCCCACGCGGGGCACGGTTAGCGCTGCTAACCTGGCCC  
GATGTACAAATTAATCTCACCAGATTGTCAGGCCACGCC

>RXA00693  
ATGTGGAAAGAGGCTTTGGAAGAATTCGGATCAGGCCCCATCCACGGCTCGGGTTATTTT  
GAGAACTATCTTCCCATCGACTATTCCGAAGCAGGATTTACCACTACCTCAAGGAGCGC  
ACTGACGCGGCGGATCCTTCGGTTCCACCACCGGAAGGTTTGTGCACTGCAGCTATTTT  
TGGATCGTTGATGATGACGATGTTCTTGTTCGGATTCTTAGCTTTAAGGCACGAGCTGAAC  
CAACATCTCCTGGAAGTCGCGGGCCACATTGGTTACGGCGTGCGCCCGTCTGCGCGTCGA  
AAAGGTGCTGCAACCGCAGCGCTGAAACTCGGTGTTTCATGAAGCTCAGGCCTTGGGCATC  
GACAAGGTTTGTGCTGCGTCGAGGAGATAACGAAGCGTCCAGGAACGTCATCGAAAAG

TGCGGTGGAGTTTATGAATCCACGATCCGTGGAATGCGACGCTATTGGATAGCCACAGAT  
TCT

>RXA00693-downstream  
TAAAAAATCTTCGCAAGAACTTA

>RXA00701-upstream  
AAGAGACGATGGCGTATAGGACGATGATGAGCATTTCCTTTTGGCCGCTACTTGGGGGA  
GTAGGCCGGCGCCGAAGCTGACCCAGGCGGCTGCGAGCAT

>RXA00701  
TTGGTAGGGGAGCCACGGTCCGATTCTTGGGTGAGCAGCGCGGATGCGAACAGTCCGGT  
GTTGCCGAGGATGAATCCGAAGCCGGTCCGAAGGCTCGTCCGCCGAGGATGAGGACAAA  
GAAGACTGCTTCAAAGCCTGCTGCGCCGGCACCGAATGGTCGGAATACGGCAACCATGGC  
GGTGAGGACGCCGAGCATGGCTACGGCTTTAACGTCGAATCCGTTTTCACTGATTTCCGGC  
GATGACAGCGGCCAGCACGAGGGGAATGACGATCGCGATGTAGAGGGGCGCTTGGGCTTT  
GTCGGACAGGAAGGATTCCGGGTTGACGATCAGCGGCCAGAAGAAAATCACGATGCTCAA  
AACCGCAAGGAAGCT

>RXA00701-downstream  
TAAGGTGAGGAAGGTTTTGGGCT

>RXA00704-upstream  
TCAAATTCTGCGCACAAAGTGTCTAAGACGACGTCTGCCCATCGGCGCTCTAATGCACA  
TTACAGCGTTTACAGAATTGAAAATGAAAGGTTCAAAGCC

>RXA00704  
TTGACCATTACTTTTAGCCGCGTTGCTCTGACCACCCTGGCAGTCACCGCAACCACTTTG  
TCCCTGAGCACTGCTGCGAATGCACAGTCTTCCTTGTTGGATAAGACTCTTGATGCCCGT  
CAGTGATCGATGCAGACAACGTCTGGGTCTCAGTTGACTATGGTGAGATTCGAAAAA  
GAACCAGAGGGCGCATGTGCCACCGAGTTCACTGATGGTGTTGTAGCTCTTGAATCTGCT  
GGGTTCAAACCTGACCTTTGACGAATCTGAAATGGGCAAATACATGACCGGTATCAACGGA  
GTTGTTTCCTGATTGGGTTGAAACTGGAACCTTACTGGAGTTACTACTCTGGTGAAGTCGCA  
GATGATTACAGCGTGACTACACCTACTACGAGGTTGGTGATCTAATTCTGAACCTGAA  
GGTGGAACCTGTTGAGGCTTGGGTTGTTGGCACCGCGAGGAAACACCAGCACTCGAGACT  
CTTCTGAAACTTCAGCAGCAACCGGATCTTCT

>RXA00704-downstream  
TAAGACGGCGGCTGGATTGCAGT

>RXA00707-upstream  
TAGTTAAAAGCACTTACCTTAACTGGTAGGTGCTTTTTTTCATGTCTACGCAGTGGGTAAC  
TTTCAGAGGAAAATTACCCAACCAAAACAAAGGAACCTTC

>RXA00707  
ATGAACGTGCAACGCAAACTGCTGGCGATCGTAGGGGCTTTCATGGCAGGGTCTTTAGCC  
TTGGGAACACCAACTGCACAGGCCCAAAGCATTGGCAGCAGTGCCTCACAGAGAACTGAA  
GTCTTACGTGGGCTGACCTCATCTGCCGGAATACCAGATGCCACAGCGCCGGAAGGCGGG  
GCAAAAGTCGTGGTCTTTGGAGATTACATGCATCAGGAACCAATGCACCATTTGATGTG  
GATGAACGCGGCTGCCTCAAGGGGAACCAATCGTGGCCTGATCAATTGCAAGCACAAACAA  
GGATTGCAGCAGGGGGAGCTCATTTGACCTTTTCCTGCAACGGCGCCTCCATCAACTCGACG  
GGTTTCCACTTTTCCGATGAAGTTCCGGCATGCAGAAGCACTAGGGGGCCATTGGACCAAT  
ACCGAGAACATCTTCATCCAATTTGGCAAGAATGATCAGTGGGGACACTCACCAATCAAT  
TTGCGCTATTCCGTGATCAACTGCCTTTTTTGATGCGGCCAACGGATGCGGTGAGAAAGCT  
GTAGCGGCTGGAACCATGCAGGATCCCTCCTCGGTACCGGCGAAAACCTATGCTCAGCGG  
ATGAAACCTGTCTACGACTACCTCAAGTACTACGCTCCAAATGCGCAGATCACGTTGCTG  
GGATACCAGGAATACACCCACGAAGCGGAAGCGAGATTTGTGTCCGCGTGGGAGGTACG  
GAACCTAAGGAAACAGACGCCACCAACCTGGTGTCTATATGAACAATCTTGAGTCGGCC

ATTTTGAAGCCTCTGAGATTCTTGACGTCCAGCATGCCAATCTCCGTGAGGCCACTGCA  
GGACACAGCAGCTGCTCAGCTGAACCGTGGGTCAACGGAGTGCTGGATATGCGGGTAAAC  
GCTGTAGGAGGCACCTGGCACCCATCTCCAAAGGGAGATGAAGTGACCGCGGGCCTCCTC  
GGAACCTTGATG

>RXA00707-downstream  
TAACTATCTAGAATTCTTCATAG

>RXA00712  
GCAGCAGAACCCACCACTAGAACGACTGTGCAAAGTGCTACAGAAGCCTCCACTACTGCA  
CCAGTGCAATGCAATTTGGATCCCCGTACCTCGGATTTTGGGCCATATCTTGACAACTCT  
CGCACCCCGGTTGGTGAGCTAGCTGGATCTGCAGATTCCGTCTGTCAGGTTCTTGACTGG  
TTCTATCACTTCCAAATGGGCGACAACGGCTACGATTCTGTTCGAAGCTCAGCTATGTG  
GTTCTCAACGGTTCCAATGGAGACGCCGAACGTTCTACTGGAACGGGTGCTGCGATCGCC  
GACGTGGTGGTGTGTTTATCGACGGCCATATGGTTGCTCGTCTCTGCTCCTTTTGAAATG  
AAGACCGTGGAATCCGTCAACAGAGTGTCAGATTGAGAAATCCAAGTTGTTTACGGACAT  
GCCGGCCGATCTACTGCCGAAGGTGTTACGGACTATTTACCTTTAACTTCTTCGTTGAC  
AACGGCGTTCTTTTACAGACGCGGCGATCTCCAGAACACATCGATACTCACATGCGTCTA  
TATCTGCTG

>RXA00712-downstream  
TAGCCCCATCTAAAACTCTTGA

>RXA00713-upstream  
AACCACGCCTCCTTGTGCGGGCCTGTCAGTAAGTGTATCGCAGGTTTCATGCGTTAAGGT  
GTGGAAGACC

>RXA00713  
ATGACAAAAGTAGCGGAGCTGGACCAAGAGTGGTCCGAAGTAGATGACGCGGAATTAGAC  
CGCAAAGCGCTGGCACTTCTGATAGTTCCAGCACAGACGACTTCGCTGACGCAGAAAAC  
ACTTCTGAAAATCTGGGACCCATCGGCCCAGAACCACTCCCTGAACCAGATGGGGATGTT  
CCGGCATCGGGTTTCCAAGTGCAGCTCGATAATTTTGAAGGTCCTTTTGACCTTCTCCTG  
CAGCTGATTACCAAGAAGAACTTGATGTCACTGAAGTTGCCCTGGCCCAGGTGACCGAC  
GAGTTTATTGCTTACACCCGAAAACCTGGGCGAAACAGCGATTTGGATGAGACCACAGAG  
TTCTTAGTGGTGGCCGCAACGCTGTGGATCTTAAAACAGCTCGCCTGCTCCCGCGTGGT  
GAAGTCGACGATGAAGATGATCTCGAATTGCTCGAAATAAAGGATCTCCTTTTCGCCAGG  
TTGTTGACGATATCGCGCTTACAAGCAAGTTGCGGAAATGTTTGCAGCAATGGCAGCGAGAT  
GCTCGACGAGGTACCCGCGCGCTGTCTCATTAGAAAATCAGTTTGCCAACCTCTTGCCG  
CCCGTTTCTTGGGTCAATCTTAAAAGTTTCAGCGAGTTGGCTGCTGTGGTGTTCGT  
CCGAAACCCCGAGAGACGGTGAAAACAGATCACGTGCACCAAGTTGCGGTGTCAGTTCCA  
GAGCAAGCGGGCAGGATTTCTTAACACGTTGAAACTTGCCGGAATTGATCATTATTTGAGC  
TTTCAGCTGCTCACACGTGATTGTACCGCGTCAATGGAAGTGATTGGCCGCTTCCTTGCC  
TTGCTGGAATTGTATAAGGCACGCGCTATTGAAACCTTGCAAGAAGAGCCACTCGGCGAG  
CTTAAAGTTTCGTGGACTGGCATTTGATGTGATCCAGCAGTCGTCGCGGCGAGTGACTGG  
GAG

>RXA00713-downstream  
TAATCAGTTTTCTTAAGGAAAC

>RXA00714-upstream  
CGTCAATCAAGCTGTCAAAAAAATACAAGTTAGGTCACAAAATGATTTTCAGTCGTGAGA  
ACCATCACATATAAGACATCTCATGATCTAACATTTCTTC

>RXA00714  
ATGGCTACGATTACACGCACCGACAGACTGATCCTCGTACCGCTCACTGTTGAGCTCGAA  
GACGAGGCCACCAGATTTACTCTGATTCTCGAATCTGGGAACACCGCCCCAGGCGCGT  
CACACCAACGTGCGTGTACGCGCGACATCATCAAGCGCACCAATGAAAGCTGGGGCAAG  
AAAGACCTTGGCCCCCTGGGGTGTTTACCTCCGTGACCGCCCATCGGAATTCGTTGGCGTT

GGTGGCGTTGAACTCATCGACGGAAAAGTATGGGACCTCAAGTACCGCCTCCGCCCCGAC  
CTATGGGGCAATGGATACGCCACGGAAATCTCCAACGCCGCAACACTGGCCACCAAGCGT  
ATCGACGACAGCCTCCCCTCACGGCCAGGGTGAATACCAACCACCTGCGCTCATTCCTG  
ATTTTGGAAAACTGGGACTCACCCCGTATGGGAAGGCCGACGAGTCGGAACGGAAGAT  
GACCCCAACGAGCCTGATGTGAGAATTTATTCTGACCGTCCGCTATCGGATGAAATTCTT  
GAAATGCTCAAGCAACGACCA

>RXA00714-downstream  
TAGACCAGAAAATCTCACCCCTT

>RXA00716-upstream  
AAAGCCGATTGCTTAACGCCCCGCTATGATAACCACTCATGAATGATTTCGATCCAGCATT  
GATTTCGCGCATGAGCCTTATCCCTCAGACGAGGTCTCGG

>RXA00716  
ATGGAATCAATCTTGTGGTGGTCGATACCCCAGTTTCAGCACGCACGCTGGCTGGGGTG  
TTGGGCATTGACGTGCCTGCAACAGAGGCAATTTTGAAGGAAATGGCCTTTGAGCTTTCT  
GAACGGGGCAGCGGCATTGATCTGCGGGAAACGGCAGAAGGATGGCGCTATTACACCCGC  
CCGGAAAATGCGGACATCGTCGAGCAATTCCTCCTCGATGGAAACCAAACCAGACTGTCC  
CGTGCAGCATTGGAACACTCGCGGTGGTGGCATATCGGCAGCCGGTCACACGCTCCAG  
ATTTACAGAGTGCAGGAGTAAATGTCGACGGCGTCATGAGAACCTTGAGCTTCGAGGC  
CTAGTCAAAGAAGTCGATGTGGACGAATCAACGGGCGCACACCGCTATGGCACAACGGAA  
TTGCTGCTTGAGCTGTTGGGTATTGATTCCTTTGGATAAATTACCAGATCTAGCACCGCTT  
TTGCCGGATGTTGACTCCATTGATGAAGACTTC

>RXA00716-downstream  
TAAAGCATCAGTTAAAGCCCCGA

>RXA00719-upstream  
CAGATGATGCACACATCGTGGACACCTCTGATATGACCATGGATCAAGTACTTGATCACC  
TCATCCACCTAGTGGAAGCCTCCGCTGAAAGGAGCAACCA

>RXA00719  
GTGACTGATAAAACACACCATGCCTGGTGAAGAGGACGACACCGTATTTCGTCTACCACACC  
CACAAAGGCGAAAATGGACGTCGAAGGTGCGTTTGCTGACGAAGAAGAACTAGCACCACAC  
GGCGGTGGGCTTCCGCAGATTTGACCCAGCAGAATTCGGCTACGAAGACTCTGACGAT  
GACTTCGATGCAGAGGACTTTGACGAACAGAGTTCTCCAACCTGATTTTCGGCGAAGAC  
TACTCTGATGAAGACTGGGAAGAAATCGAGACCGCATTCGGATTTCGACCCAAGCCACCTT  
GAAGAAGCTCTCTGCACGGTCGCTATCGTCGGACGCCCCAAATGTTGGTAAATCAACCTTG  
GTGAACCGCTTTATTGGACGTCGAGAAGCAGTCGTGGAAGATTTCCCCGGCGTAACCCGT  
GACCGCATCTCCTACATCTCTGACTGGGGTGGACACCGTTTCTGGGTTTCAGGACACAGGC  
GGATGGGATCCTAACGTCAAGGGCATCCACGCATCGATCGCACAGCAAGCAGAAGTTGCT  
ATGAGCACTGCCGATGTATCGTATTCGTGCTGGACACCAAGGTGGGCATCACCGAACT  
GACTCAGTGATGGCAGCAAACTGTTGCGCTCGGAAGTGCCAGTGATCTTGGTTGCGAAC  
AAATTCGACTCCGACAGCCAGTGGGCTGACATGGCTGAGTTCTACAGCCTCGGCCTTGGC  
GATCCATACCCAGTTTCAGCCCAGCATGGACGTTGGTGGCGCTGACGTTTGGACAAAGTC  
CTTGAACTCTTCCCAGAAGAGCCTCGCTCCAAGTCCATCGTGGAAGGCCCTCGTCGTGTC  
GCCCTTGTGGGTAAAGCCAAACGTGGGTAAAGTCTTCACTGCTCAACAAGTTTGCTGGCGAG  
ACCCGCTCTGTGCTGGACAATGTTGCAGGAACACCGTTGACCCCGTTGACTCCCTGATT  
CAGCTGGATCAAAAATGTGGAAATTCGTGGATACTGCTGGTCTTCGCAAAAAGGTCAAG  
ACTGCATCTGGCCACGAGTACTACGCATCACTGCGTACCCACGGTGCCATCGATGCAGCT  
GAGCTGTGTGTTTTGCTTATCGATTCTCCGAACCCATCACCGAGCAGGATCAGCGCGTG  
CTCGCAATGATCACCGATGCCGGTAAGGCACTGGTTATTGCGTTCAACAAGTGGGATCTC  
ATGGATGAAGATCGCCGCATCGATTGGATCGCGAACTTGATCTCCAGTTGGCACACGTG  
CCTTGGGCAAAGCGCATCAACATCTCCGCCAAAACCGGTCGTGCACTGCAGCGCCTCGAG  
CCAGCAATGTTGGAAGCGCTCGACAACCTGGGATCGCCGTATCTCCACTGGTCAGCTGAAC  
ACCTGGCTGCGTGAAGCAATTGCTGCGAACCCACCACCAATGCGTGGCGGACGTTTGCTT  
CGAGTGCTGTTTGCCACCCAGGCATCTACTCAGCCACCAGTGATCGTACTGTTACCACC  
GGCTTCCTCGAAGCAGGTTACCGACGATACCTGGAGCGCAAGTTCCGTGAACGTTTCGGC



TTTGAAGGCACTCCAGTGCGAATCGCTGTGCGTGTTCGCGAGCGCCGCGGCAAGGGCGGA  
 AACAAGCAG

>RXA00719-downstream  
 TAAAGCTTGATTTTCCCTAAAAG

>RXA00720-upstream  
 CTGATCTATACGTCTGTTGAAGTAGAGAAGCTTTCTGGTCAAGTTCCTTGAGTATGGTG  
 GTCGAAGACCAGCACTCCAGATTCAAGGAACCTATAAAAC

>RXA00720  
 ATGGCATCACCGCGCCGCCACAGGTTGCAGCACCACGCATCAAAGAACTTCGCCTAACA  
 GGCCTTGACAACGCTGACCCTCAAGACATCGAATCGAATGAGCAGATAGAGTCATGCCGT  
 TTTAACGAGGCCGAGCTTTCCGAACGCGATCTTTCTGGTGTGGTTTTCATTGAATGTGAA  
 TTCCTTGGGCTGGAAGCACACGAAACCGAGCTACGCCGGGCTCAATTTCGTGGAAACACGC  
 ATCGAAAGAGCCAATGCTCCATCTTTTAAGGCAGCCGCTCCATCTGGCGCAACGCAACG  
 ATTTCCGACTCCCGCTTTGGTGCCGTCGAAATGTATGAAGCAACCGTCCAAGCTTTGAAA  
 ATCTCTGATTCTAAGCTGTCTGTTGTCAATCTGCGGGGTGCATCGTTACGGGATGTGCTC  
 TTTGAGAACTGTGTTCATCGACGAGCTTGATCTTGGCCAAGCCAGAGCAGAACGCATCGCT  
 TTTAAAGACTGCACGGTGCATTTCGCTCACCTTTGATCATGCCGTGCTCAGCAATGTGGAT  
 CTTCGCGGTTTAGATATCGAGCGCATCAGTGGCGTGAGTCCATGTCCGGAACCGTGATC  
 TCATCCCTGCAGGCTGCTGACCTGTGCGGAGCATTTGCACGGCATTTAGGAATTACTGTA  
 AACGAT

>RXA00720-downstream  
 TAGAAATCCGCTCTTTTGAACAA

>RXA00722-upstream  
 CCCCCCGGTGATC

>RXA00722  
 TTGCTGCCAACGGTCTTTTGACCAAGCGTGAGCTGGTTTCCATTGAGCGTTCCAGCCAT  
 GCTTTTGAGCAAAGTGTGGTTATTTGCTACTGCCACGTTGGTTGCAGGTCTTGCAGCG  
 GTGTCCGTTTCATGAGCCAGCGCAACCCCTGGCGGTGGATTCTATGCCATGGCAGAGGCC  
 GCCGGTTCCATGCGCACGGCCACGATCCGCGCCGCCACCAGCGCCGCGCTCACCCAGGCC  
 GGCGCATGCTCCAAGGGTGATCTATTAAGCTTCATCGGCCCGGAGATAGCTCTGGTCTCC  
 GAGGAGCTCAACGACGCGCTATCGCGCACCGCTTTAAGGCTTCTCGACGGCTCCAGCGAG  
 CAAATTACCCTTCTCATAGCGCAAGACCGTCAGTCCGCCTTCGACGAAGATGTTTCCGC  
 CGTGGCCTGGGAACCTCACACGGATGTGGAGATCACGGTCTATCCTGCTACTGGAATGGAG  
 AATCTGGTAGAGATCGGAGTGGAG

>RXA00722-downstream  
 TAGCCACATGTTGGGTGGCATG

>RXA00724  
 ATCGGTGAGGAAGTCTCGCCGGACGCCAAGCCTATGTGGTGTGTCCGCGCATTGAAGGC  
 GAAGCGGCGTGTCTGGAATCCACGCCTATCTTTCCGAACAGGTATATCCAGGATTGAAT  
 GTTGGAATGCTGCACGGTCGCATGGACACGGATCTCAAAGATTTCGGTCATGCAGGAATTC  
 GCCCAAGGTGAGATCGATATTTTGGTCCGCCACCACGGTCATTGAGGTCCGTATTGACGTT  
 GCCAACGCCACCGTCATGCTCATCCGCGAGGCGGAACGCTTCGGCGTTTCCCAGATCCAC  
 CAGCTGCGCGGCCGTGTGGCCGTGGGCAGCACGATTCCCTCTGCCTGCTGCACACCACC  
 TTCGACGAGGACTCCCCACAAGGCCAACGCCTCGCCGCAATTTCCACCACAACCGACGGT  
 TTTCAACTCTCTGAACCTTGATTTGCAGGTACGCCAAGAAGGCGACGTGTTGGGCACCCGC  
 CAGTCCGGCAGCGACACCAAACTCCGTCACCTCTCGTTTATCAGCGACCAAAAAATCATC  
 GAGCGTGCGCTTATCGACGCCACCGAGCTGGTTGCCGCCAGCCGTTCCAGGGCGCTTGAG  
 CTGGTCAGCGACATCGCAATGATCAACCAGGAATACCTGGAAGAGC

>RXA00724-downstream  
 TGATATTGATAGGGTTTAAGTCA

>RXA00726

CACGAAATGGGCTTCGCCCCACGAAGTCGCCGACCAGGTCGTGTTTCATGGCCGATGGAGTT  
GTCGTTGAAGCCGGAACCCCCGAACAAGTTCCTGGACAATCCAAAGGAACAGCGCACCAAA  
GACTTCCTGTCTTCTCTGCTC

>RXA00726-downstream

TAACCTTTTCGGGTCTTAAAAAA

>RXA00729

ACAGTTGTTGAGGACTACCAAGAGTTCACCTCGCGGTCTGTTCCCTTGAATGGTTGCCGTG  
TCTATCCTTGTTCCGTTGGGAATGATGGATATGCCGGATGCCAAGAAGCGCCTCGCAATC  
GTCATCCCGCTATTTATAATCTGCGCCATGCTGGGATTCTTTGGAACATCCTTCACTAGT  
GCGCCTCGCACCGATCCTTCACTGATCTTTGTCTTTCATCTGTGCTGCGATCGCTGTGTGT  
GCTCTTGTTCTTCTGTTGTTTCAGGATCATTCTTCTTGCTGGCGGTTCGTATGTACGCG  
CCAATCATGGAATCTCTGTCCAACCGTGACTTGTGCGGTTCATCGGCGTGTCTTGCTTGGC  
GCGCTCACCGGTGTGATCTTGTGTTGTGAAGTTTTGTCTTATGTTCTCGAGCACCACCGC  
ACCATCACGCTGACCATCATGGCTGGTCTCATGCTGGGTTCACCTTCGTGCGCTGTGGCCT  
TGGCAGGACGGTGACGCTAATCTACTTGCTCCTGGCGATAACGCCGTGATGATTTTCAGC  
ATCATCATCTTGGTGGCGGATTTGCTGCTGCTTTGATGTTTGCTGAGCGTGTGTCTTCC  
AAGAACATTGATTCTGAGACCGTGGCAGAAGAGCACCCGCGC

>RXA00729-downstream

TAAATAAGAACTCCACAAAGAAA

>RXA00730

CACCTTTGTTGTATTCCAAAAGCAGCTTCAACAGGCAGATCCAAATGCAGAATATGATCTC  
GATGTGCTCGCATTTGATATCGCACGCGTAGCCAACCTCCTTCGCTGGGCTGCTTATACA  
GATCTGTTGCTCCCTGCAGAAGCCCGTTGGTTCCAAGACCAGCTGGGAATTGCGGCTGCT  
GTGTCCTTTGGGAGCTGGGAAGAATACGGAGAGCGATACGTCCGTGGACTACAGAAGAAC  
TTCAAGGGCGGAAACAAGCCATATATCGAAGGAGAACGCTGGCTCAACACTGAGGCTGAA  
AGTCCATGGAAGACCCAAAAGTGGATTAGCGCC

>RXA00730-downstream

TAACGTGCTCATGAGCTAAGCGGC

>RXA00731

TTATTATTTCGGTCTGAGATGGCTGGGCAGGTCCCTGCGTTTCGCACCGTTAAGCCTGCTC  
ATGATCGTTGTCATGCGGGGTTTGAGGGAAGTGTGTTGGCGCCGAAGATCCCGCAAATAGC  
TCTTTGGTAGACAACCTTGGGCTCACCTGCCGTGGTCTCTTAATGATCCGCATTTTCTC  
ACCGCAGGGTTTAGCGCTTCCACCACCACAGCAGCGCTCATGTCCACGTTGTGGATCATC  
GTGTTTGGCGGTGCCCTCTGAACGGATTCTGGGCAGCCTCAAATTCGCGATCACAGCAGCG  
CTTATCCACATCACTTCCATTCCGCTGGGCATCGGCATCGCCACCTCATCGAAGAAGCC  
GATCTCAACCGCTGGGGCAACAACATGTTGGCCGATGTGCTGCTCACCCAGATTTCTGG  
GTCTTCGGCGCTCGCCGCTTTTCGCATCCGCCTCCATGCCACTGCTCTGGCGACGGCGCACC  
CGATTGTTCCCTCTTTACTATCACCTTGACGCTGCTGCTTTATACGGGCACGCTTGCCGAC  
GTCACCATGCTCACCGCGACCATCATCGGCACCGTTGCCGCGAGTTGAACAGGCATCGG  
AAAACCCAGGTGGCCGCTGGCTTCCCGGTTCCCTCACCGTGCGTGAAGCGCGCATTATG  
ACGGCCATTTTGGTCACTGCCGTAGCAGCAGGTCCAGTGCTTGCTGCGCTTAATCCACTC  
ACCCACGGCCCTTTTCCAGTGCAACGAAATTGATCTGGCAGCCCCCTTGTCATGAAGAA  
CACATGCATCACTCTGCCACACAGACAGCACCTCTGATGCATGCCAAGGTGCGCTTGAT  
CAGCTCCAACAGCACGGTGTTGGCCCTTCCGTTGCCAACCTGATTCCACTGATCCTCACC  
GTGGTCTTTCGATGGGGCTTAGCCGCGGACGTCGACTGTCATGGATTTTGGCGGTTTTC  
GCCCAGCTCAATTCATCGCAGTGTGATGTTCCAGCTGACCAAACATATCGGCTGATTCC  
ACCGATCTTCTATGCTAGTCAATGCCTTTAGCGTGATCGTTCCCTTGGCTGGTGGCGCTC  
GCCGTCTTGGTGTTTCCCGCCGTCATTCCAGGTGAAGATTGATACCAACCGGATTTCT  
AAATCCTTAGGCGCTCTCATGGTTACATGGTTGGCAACGGCAGCATTTGTGGATCCTTGCC

ACATTGTTTCCTGCCACACGCATTCCACCCACATCCAACATTGGGGCTGGCTTTCAAAGAA  
CTCCCCCTCCGCTATCTCCCACTATCGAAACGGTGTTAAGCCATCAACTCTTCCCC  
AGAAGCCCTGCTGGGTGGGCAGTGTTTGAATGGACTGGAACGCTATTCTGGCTGGTCGTA  
GCAGCAACTCTTTATCATCTGCTCATGGGTGTGCCAGCAACAAAGCGCACGAGGACCAA  
GAAAACGCAGCGACTCTCTGCGCTCTGGCAGCGGCGATCACTTGTCTGGATGACCATT  
TGGGGTGGCAATACGTATTGGTGGGCACCAGAAAATGCAGGATATGTGGCCTACCGCGTG  
AAAAGGGGCATCGCAATTACATTGGGTGAGCCTATTCTGGGTCCGGATTTCATCCGTCTCT  
AAAGCAGAGCTGGCCGACAGTTTGAAGAATTTGCCAGCAACCAAGGCTGGATTGTTGCG  
TGGTATTCCGTTTGTGAAGAATTCTCAAAGGAACGCATCAACGCTGGCCACCACACACTT  
CGTGTGGCTGAGGAAGCAGTCTTAAGCTCAGCTAATGCGGATTTCAAAGGTAAGCACTTC  
CAAAATGTCCGCACCGCCCCGAAACCGCGCGGCCAAAGAGGGCGTAAGTTCCATCTGGACA  
ACCTGGGGCTGATTTGAGTGCCGAAATGCAGCACAAGATCATCACGCTGTCCGAAGAATGG  
GTCTCTGATAAAGCTCTGCCGGAGATGGGCTTCACGCTTGGCACTGTCAACGAGCTCTCA  
GATCCAGATACCTATCTTCTCTCGGATTTGATGAGGAAGAGCATCTGCACGGTGTGACC  
AGTTGGTTGCCGGTCTATGAAAAAGGACGCATCGTCCGCTACACACTTGATGTGATGCGC  
CGTGATCCGCAAGGCTTTAAATCTGTCACTCGAGTTTCTCATTTCCGAGGCCGTGCTTATC  
GCAAGGGATCACGATCTGGAATGGATGTCTGATGTCCGGCGCTCCTTTGAGTACGCCCCCA  
GGTGTGGCCGACGACGGCACCATCGGACAAATTTTGGAGCTTTTGGGCCGAGCAATGGAG  
CCGTTCTACGGTTTCCGTTCCCTCGCTGCGTCCAAGAACAAATTCACCCAGAACACCAC  
GGTTGGTACTTGTGTTACCGCGATGAATTATCGTTACCAAGCATTGGCCTTGCCGTTGCT  
GCCTGCTACCTCAACGAGTTTCCGCTGCCGAATTGGCTGAAAAGACCGCCACTTCCGCC  
CCAAGCCACAGC

>RXA00731-downstream  
TAGAAAAACGCGTAACCTTGGTG

>RXA00738-upstream  
CATGCCCCTATTAGACGGATGGCTTTTTTTGATTTTGGGCGCGATATGCGGCCCGGTGAGC  
GCCGGTCGTATGGCACT

>RXA00738  
TTGCTTAACGACGCCACGACGCAGGTGTGCGACATCCTCGGCAATGCCCTTCACCCGATCT  
GGGCTCAACGCTGAGTACGCGAATCTTTATGGTCAGGCGTTGGTGGGCATGGTGTGATG  
ACGGCGCAATGGTGGTTGGATGAGCGCACTCCGCCGAAGGAAGAAGTTGCCGCACATATT  
GTTAATCTTTGTTGGAATGGTTTGACGGGGATGGAAGCCGATCCGAAGTTAACTCCCATC  
AGTTCTGCTGAGGGTGCGATTTTTTGGTCAAGAAAAGGAGAGTGAAGCG

>RXA00738-downstream  
TGACACCTATGCTCGCGGGGCTG

>RXA00739-upstream  
TTAAAGTTTCTATATTCCATTCTAAAATAACTTTGAATTGGGGATTAATGAAACTTTTTTA  
AGCAATTGTTTTAAACGAATATTGAGGGGGTGGCGGGCAA

>RXA00739  
GTGACTGCGACAGTTTTAGAACCGCAACCTGTACAGCTTAGTGAGCAGGACGTAGATGCT  
GAGATTGCGCGCATGGAGCTTAAACACAACCGACACAAGACGTGGCGACGCCGAACGATG  
GCTGTTGTTCATGACGCTCTTGATCTCAGTGGGTTTGAGCTTTGGTGCGTTTGGTAACAAG  
GAACGTGAAGCTAATGCTTTCGCCAGCGCTATTATTGCCCAGGTTGTGCGTGCTATGGGC  
GAGGTTGCCCTTTGAAGCGATTTGTCCAGTGATGGTGACACCGAGATGCTTCTTAAGTGC  
ATCACCGAGAACTTAGGTGAAATGCACATTATCGAGAAGTGTCTCGAAGCAGAAGATGTC  
TTGAAGTGCTTCTACGATGCGAAAAACGAAGAGCAACGTAAAGAACAGAACCTTGATAAA  
GCCCCGTGATTACTCCATGTACCGTATGGCCTCTGCGATGGCATCGTTCTATGGCAATGGT  
CGGGCAGCTACTGCCGGTGTAGAGGAAGGCGGACCGAACGAGTTCCTCGATTCTGAGGAC  
GCCGGTCTTAAGGTGTGGGAGGGCATTCTCAGTAAGGCCGCCAACGGAGGCAATGTCCTT  
GGTTATGCTGACGCGAAACACAACGAGGACTCTGGTTGGTTCTTTGGTAATGGTGTGGC  
AACAACGAGAAAAACGTACTCCTATGATTCTCTAGCTGATCATGCCTTTCAAGGGCCTTAT  
CACTTTGCATTATTTGGCGCGACACTGAGTGGCTTAGGCTTTGATAGCTCAAAGGCGGAG  
GATTTCGACAGCTGATTTTGTCTACGCGTAAGGGCATG

>RXA00740-upstream

GTTATAAAATATTAAAGTACGCTAACCATGGGTGCAGGGGAGACTTCTACAGCAGTCATG  
GTCCACACCACGACTGCTGTATATATTAAGGACGTAACCTC

>RXA00740

ATGTTGAAGAATAAACTCTTGCGCTGCTGGCTGTCAGTACGCTGATGTTTGGCTTATCT  
GCTTGCTCTAGTGATGCTGACGGCCCGACAGTAGCGGTGCTAGTAGTAGCAGTACTGGC  
TCATCTTCTGCATCGGCTGACACAACAGATTCTGCAGCTGTTGATAAGGATGCTCAATTA  
GACACCTTTATGCGTTCTGCTGTGGCTGATGGATCATCTGCTGCTGTGGCTGTGGACAAC  
GCTGTAGGTAAGGGCTTTGATAAAGCTGATGCGCAGGCGGCTGCGGAGCGCTTGGGTGAT  
GGTTTCCAATTCTGCTGCGGATTACCAGGCTGTTGGCTATTTGGAATCTTGGTACTTTGGT  
GGCGCGCAAGCGAGAAGCTTGACGAGGTGCGTAGTGATGTCATCGCTCATTTGTCTGAA  
TTGGGATTTACAGATTTAGAGGCTGAATCCTCGGCATCTCGTATTACATTAGGTGATTAC  
TGTGATGGGGTCCCTGAGTATTGTGAGTTGTTTTTTGATGGCGAATCTCCTGACTTGTAT  
GACATGGGTACGGAGCTTGACTCGTATAAGCCCACTGAA

>RXA00740-downstream

TAAAGCTATTTCACTTAAAGCAC

>RXA00741-upstream

TGGTGATCACTAGGTCCACCTCGTCTTGCATGGTGGTCACCTCAGTCCAGAACGCATTGA  
TTGACACCGATCAAATGTTTGATGGATTATGATATTTAGC

>RXA00741

ATGACTGATTCTCTGCTTGTATCCATCAGAAAAGGCTTAATAGAAGAGCGTCCATTAACG  
GAGCTTCTTCGGGCGTGATCTTCCCTTGAAGTGATACTAACTCGGACTCTTTACAAGAG  
TGGGCGAAAAATGAATTAAATGGTTATGGCTCCATTGATGGTATTCCGGAATATCGCAAA  
TTGAAAGGACCTCCTGTATTTCGCGAAAAATTCAGCTGGTAATTCAATAATGTCTAATATG  
GTACTGGGGCCACATAATGTTCCCTGAAAGAGCTCGTAAGTATTTCCCTGAAGAGCTGCAT  
TTTGATCAGCCGATTCAAACGCTAATTGAATGGTTCGACTAGGCAGGATGGGATTAATTTA  
TCGCCCCCGAATTTACTTCGGGTCCGCGATCTTCATAATGATCAGTACGCGCCATTAAAT  
CAAATTTTGAATTTAAATGTTTACTTAGATAACTCTTATTTTTTCGGGAATTGTGGACCGC  
ATCCGAACCTCTAATGACTTCCATGATTGCCGACCTCACACACGCAACTCCTCTGGATGAA  
CTACCAAGCAGCGAAAAGGTTAATGCCACGGTCATGAAGCACATTGAAAATAACTACGAA  
ACTACAATCACTCAAGCCAATGGAGCTGTAGCCATTGGTAACAGCGCTAAAGCTGTGCAG  
AAGGGATTGTCCGTGGATGACCTACTGAAGATTATGCAGACCATTAATCCTGAAAAGTTC  
GACTTAGGGGAAGCTAGAGCTGAAGCCGAAGAAAGCATTCAATCCATCGCGGATGAGTTG  
AGAAGGAGTCTCCGAATAAAGGTTTATCCAGAATGCTTTTGAAAAGTTGAAGGAATC  
AGCATAAAGCCGCGGATAAAGCCTTCACTACAATGTTAAATCTTGTAGGTAAACAGATA  
ATCGAAAACATCCCACAACTGGTTTCAGGTGGC

>RXA00741-downstream

TAGAGAAATTCAAGGCCGTCAGC

>RXA00742-upstream

AGAGGGGTTTTTTAGTGAAAAATGATAAAACCACTTTTACAGATGGACACATAGATATTAG  
TAATGATGCTTCTGGAGCTAAGCGTAGCTTTGGGGGTCGG

>RXA00742

GTGAATGTTTCAGATTAAAGGGCGAAAGGTTAATGCCAAGGCTGCCGACTTAAATAGCTAT  
CCGGTCTCAGTAGTTGATCTACGAGGCTTCGTGACACTGGCTGGTCTCTTATTTTTTGTG  
GTTGATATTGATAAGAAATCAAATAAGAAATATCCAAAGTATGTTCTTTTGAAACCGTTT  
TATATTTCATGATCTACTGAGTAAAGCGAAGCCGGGCCAAAAGACAATTAGCGTCCGCTTA  
AAACGGTTACCATCTGATGAAGATCGAATGGAAGCCATAATCGCATTAGCGCTCGCATCG  
AGGCAAGAAAAGATAGTCGAGAACCCAGTAACCTATCTCTATGAAAATATGGAATCAATT  
ACTGTTAAATCGGCTGAACCCCTTAATAGGGATAAGCTGGCTGTATATGATGGTAGTTTCG  
CCAGACCATTCGATCATTTATTCGTACTGGGGATGGAATTGAACAGTTTCGTCAATGCCACC

GTAGAAATAATACCCCGAATATGCAGTTTCATCAAGCCAATTATAATGTTTCGTGTAAT  
 GGGGTCGTCTATGACAATGTTTTGCATCGAAACATTGATGATGAGCACATTGAATTGAAA  
 ATCGGAAAGGGGATTACTCTCCGCTACAAAAGCTCGCCATTGATGCTCCGGGGAGCGTT  
 ACGGTTGAGTTTCAAGATAGTCTTCTGAAACGGTTAAAAGACATTGAGTTCTTCTTAGGA  
 GTGCTTCAGGCGAATACGTTTTTATTAATGAAGAACCTGTTGTGTTGAAGATTAACTCG  
 AACC GGACTGTGGCTGACCTTAAGGATGAAGCGGGTGTCTTCGTGAGTTGGTAGAAATA  
 GCTAACCATTTCAATATTGATCCGTCCTTATTCGAATTGGTGAGATTACAGAAAAACAG  
 TTCTGGCAGTTGGATATTGTGTATCGAACAGCCGTTAAGGGAGAATACGTAAAGAATTTA  
 GAGGTTAAAGATGAGACTAGACTTATATTGCAGCCTTTTGGTCGTTGGAATCTTGCGTTG  
 ATAGCTCACCTGGTGATGTTGCAGGGGAGTGGACTTATCATGAAGTAATTTCCAAGCGT  
 CATCATTTTGTCTATGACACCTTCAACGGATCGGAGCGACTCCTCAATCGAGCGAGTGACG  
 CCGTACGAGCTCATTGATAATCGATGGCTTCCATCAGTATTGAATCTGCATTTGGATAAG  
 CTTGTTGATTTCTATTACAGCGCTTGAAGAACTGTTGATGTTGATAATCTCGCCACATGG  
 ATGGTGCTTCGCCTAATTAAGGCAGCTGATTCTGAGCAGAGCAGGAAAACTGCATTTCTT  
 ATAGCAGCTCAAGCTCTCAATGATTGGCTCGTGGAACGAGATCGAGAAGAGTCGCCAATT  
 TACAGGCTTAATGGTTGGCAAATTTGTATCGCCAAACTGGATTACTGGATTACAAAGA  
 ACAGAAATTCGATCTTTTAGGCATAATCTTGATCAAACAATGCACCCAGACAATAATAGC  
 GAGATTATGATTGGTTGCGCTTTGCTTCTTGACGATAGAGAAGAGGCGAATTTTTTGTCTT  
 ACTCAGCTTTTCGGTTGATCGACGCGCAGTTTTTAAATGAATGGCCGATAGCTCAATTGATG  
 ACGGGTGCCCTAAAGAAGAGATTGAAAAA

>RXA00742-downstream  
 TGAGTTCTGAGATCTTGATTAA

>RXA00743-upstream  
 ATTTTGGCGTAGTGTTCGGGTTTTATAGGTTGAGATTGAAATACCAAGACAAGGATGGA  
 CATCATGTCAGCGCATCTACCTTCTCATCATGATGAGTTA

>RXA00743  
 GTGCAGCACTTAGTTCTTGCGGATGTAAAGTATCGGGAGCTCAGTGCGTTATCGGTCAAA  
 ATTGAGGAACCATCAGATCGTCTGAGTTTAAACTTGGAGTTACTGTTAACGACAAGAGT  
 AAAGACGAAGAAGGTGTGCCGCGAATCATTGAGGTTTCATTGAGGGTGCCATCGAGGTT  
 CCCGACGGAAGATAACGGTAGAGCCTGAAGCAATCTATTTGATTCTTGAGAATAAGGTT  
 TATTTAACGGAATCTGATGCAATGGTGGATTATTTTAACAACCATGCGATTTTACTCTG  
 GTGCCATATGCACGACAGGCCGTGTCTGATTTAGGGCAGCGTGCAATCCACACGCAGATC  
 CTCATGCCTGCGTTAGGTCTGTGATTTGGTTTTTAGTAAATCGACGGCCTCACGAGAA  
 TGG

>RXA00743-downstream  
 TAGAGAATTACCTGATAGTTGCA

>RXA00745-upstream  
 TTTGACGTGGGATGGCCACACCGGTGACGGGGTCAATGTGCAGAATCTGTGCAGTGGTGA  
 GTTCAGCATTGTTTTCCGCATCAGATAACGCGGTGGGCGA

>RXA00745  
 GTGGCTTATCTGTACGGATCTGCCGATGGGATGCTTAATACAGATGGTTTTAATATGTTT  
 CCGCGTGCCTGTACACCATTTCTTGGCCCTATGGATGCTGACGCGGTGCGTGTGTACCAA  
 CAGCTACTGAACAGCACGATTCCCATGGATTTGGCACGTCTTGTAACCACGCATAATTCC  
 GGTGCAAGTTATCTTCGCCGCGGTGCTACCAACGTAGTTTTTTGAAACGAATCTTGCCCTC  
 GGTGTGAATCCGTATATGAAGAAACGCCGAGCAACAGAAGCACAACGTGGTAAGAAGCGT  
 TTTAAACGAGACAGTCATTACGGCGGTGGCACTGTGACCACAGGTACTGCTGATTTGGAT  
 GTGGTGGCGATGCAGGCGCGGGCAGAGCACCGGAAGAAAGGTTGGGAGAAAAATCTACC  
 CGCAAGAAAGAGGAGCTTGCTGCAGTAGAGGCGAAAGAGTTAGCTGCGAAGAAGGGTCCG  
 CAGACTGTGGAAGAAGGTCCTTGCTGCGGTGGAGAAGAAACACCTGGCGAAGCGG

>RXA00745-downstream  
 TAGGCGACGTGGTTGGCGGTGGG

>RXA00746-upstream

AAACTACGTTGGTAGCACCCGCGGCGAAGATAAATTGCACCGGAATTATGCGTGTTACAA  
GACGTGCCAAATCCATGGGAATCGTGCTGTTTACAGTAGCTG

>RXA00746

TTGGTACACACCGACCGCGTCAGCATCCATAGGGCCAAGAATGGTGTACGACGCACGCGG  
AAACATATTTAAACCATCTGTATTAAGCATCCCATCGGCAGATCCGTACAGATAAGCCAC  
TCGCCCCACCGCGTTATCTGATGCGGAAAACAATGCTGAACTCACCCTGCACAGATTCTG  
CACATTGACCCCGTCACCGGTGTGGCCATCCCACGTCAAACATTCTGCTGGGTGAGGAT  
TTTCAGACTATGGCCAGCTCTTTTAGTCAAATCCGCCATGGATGGGGTATCACCCAGCTC  
ATCGGACAAGACCCCAACAGAAACCAACCAATCCGCTCTGCTGATACGTGGACAGTGA  
GGATCGACTGGACTACCCGGCTTTAATACTGCTACGCATAATACAGATGACACAGACGCC  
ACTGCCGCATATACCATGCCGGCAAGCGATCCTGCCGTAGGACTATGCGCACTGGAATCC  
AACAAAGACGCACCCGTGGATGAATTTTCGCGATCTCAGCCTCAGTGCTTTACGTACCGCT  
ACGGTCATGTCAAGCTCTGGCTCCGCGGTGATTACTATGCATGATCCTATGGTCATGAGC  
ACCACTGGCGCATTGGAAGCACGTGCATACGTTGACGGCGAAGTCATCAACCAGCACGAT  
CTTGACTCACTGCGTGACCAGCTAGGTATTACTACAGACAGCGCAGATACCACCCCTGCC  
CTACCTGCTGATCCCTTGGCAGCATTTGGGCTTGAGCACACCAACTACATCAGCTCTTGTC  
CCAGGTCTTGCCGAGCTGGACTGCCCTCAACACTGATCAAGCTCGCACCTGGCATGACCGT  
GACAACAGCATTTGGCACTGGTAAACCAGCTATTCTTGCCGTGATTAACGCCGAGCTCGCT  
GATGATTACACCTGCAGATCCTCAAAAATAGCACTGCGACCCCCACCGACTCCACCGAC  
TCCAGCGCATCTGCTGAACGCTTCGTAGCGCAGCTACCTGCGGAAACAGCCTTTGTGCTT  
ATTGATCCGGACATCGGCGCTGTGACCGATCTGTTCTTTATCAACAGCATAAATCAGGAT  
CTCCCCGCACCGACAACCCAGATCAACTCAGTAGCGGTAGATCAACGTGACCCCAACATC  
ATCTACGCGACCTTTGCCAATGATGACCGCGTGTACCAGCTCATGCTGGGT

>RXA00746-downstream

TAACCGCGACCCGTTTTTATCTG

>RXA00747-upstream

TGTGCTGATCCGCGCGTGCCAACTCGCACTGGGTGCGACTGGGTGCGCACAACCGCATAC  
ACATACACACAATTAATCACCCCTCAACACGAAGATTTATC

>RXA00747

ATGACATTTTTGCACCGTTCCGCCAGTTTCCACCCTCGTACCCACGATCACCTCAGCGAG  
CTCGGTCTTGATCCTTATAAGCTCTCTCAAGACATCCCCACTGTTATTTATGAAGTCCAG  
CCGCACAGTGTGTTTCAATTTAAATTCACACTGCCGATGTTCCGGGTCTATCAGGAACAC  
TCCGATCTCTTTGTCGACATGCTGTGCTTGTGATCCAGAACAGCGTAAACATGAGCAT  
GACCAGCTCCTTAAAGAGATTCTCGACCTCGATGCCCCCTCGTGTCAACGATGATATTAGT  
GGTCGCACGACAGTGTCTCCACGATAAAACAGTTGTTACGCACAGTGGTGGCCCCATT  
GCGATTATTCCGCACAATCCCGATGTCGCCAGCGCGCTGCGTCAGCTAATAAACACAAA  
CAATCTGTGATGACAACATCCAGGCATCCTTATGCGCAGATGTCTCTCAGCGACATGCTG  
AAACAAGGCTTCACGCTCACACCTCTAGAGTTCCCTACTGCGCTGTTGATGACCCCGAC  
AGCTCACGCCACACAATGCACGTCATCAACGTTTCGAGATCATACAGTG

>RXA00747-downstream

TGAACTACCGCGCCGCTAGAGAT

>RXA00748-upstream

AAGCCTTATTCTCCTCTTAACCTACCATGAGGTAACCATCTAAAGTAGATGGTTGCAACAA  
CTTTTCATTACATCAACATGTTTAAAAAAGGACACTGATT

>RXA00748

ATGACTTACTTCGCACTCGTTGCTCGCAATTACGCTGAGACAGGTGTCTCTGTTGAATTC  
CATGAGGTCGATGATGACGCAGATAACTCAAATGGCCCCAACAACACAAGCAATTTACCT  
CTAAAACTTCTTCGAGATCACTCTTTTGATGCCACTGTTGTCTATGGTGACCTGGTGCTT  
CACACCTCAGCACATCTCAGAGATACGGCTATCGCCAACTCAGACAACCGTCCGCGAGTA  
GTGACCACAGCTCAAAAATTTCTTTGATTACATCCGCTTAGCCACCAGACACGGTGCTATC

CACGACATGATCAATAACGCGCCAGATACCGGCACTGACATCGTTGTTATTACGGCCACT  
AATGATGCTCTTATTAGTGATGAATCAGAATACTATGACGAGCTTTTTCATATTCTCGAA  
TCCGCACAGGGTGTGATTCTTAAA

>RXA00748-downstream  
TGATTGATTAATTGATATGATTA

>RXA00749-upstream  
CGTTTCGATCATTTGTAACATTCTTATTACAAGACTGGAAATAAAGGTGAGTCAATCATA  
CAGTCAGATGTGGTCATCGGCAAAACAGAAAGGAATCCCG

>RXA00749  
ATGTTACGAAAAACAGTTACCGGTGGAATTGTTGCTCTTATTGCGACTGCCACTCTCATG  
AATTCTGTCTCTTCTGCTGAAGAGGTATCCGGAGATGTCTCAGCAGTAGATCTCGCATTT  
GCAGAAATTCGAACGTACAACGTGACAGGACGTGGCCAATGGAGTGCCAGAGGCTATAGCT  
AATGCAGAAAAAATTTCCAATTTCACTCCGAGCGAAGTAGAGGGCTTCAAGAGTCTTTTA  
GCTAGTGATGCAGTGCTGAGGTGCGTCTCTGGAGAAGAAATCTCCCAGATAATGTTGAA  
GTGGTTTCAGACGGACAACGTAGGCGACGAAGATCCAAATGTCATTTCTCCAGCAGCCTGG  
CAGGGTTCTGATTATATTGAGGGGTGTTTAAACGAATACCTCTCTACGGAATTGAAGTCCTA  
AAGGTTTGTACTGGTGGAACCTACTACTCCAATGTAGGAATCGCTACTTCTGTCAGCAAT  
CCTCGCAGTTACGTAAAGTATAACAGTGCTCCAGGATTGGCAGTGACGACAAGCAATCCA  
CGTGGAGGTATAGAGGGTGGTCTTGCGGCTTCTATGGTGATGTTAACCTTGTGCTTTT  
CCAAATATTCCATGGGTGGGACCAATTAGTTCCTCTGCAGGAACACCCGCGTTGTCGCT  
AGATCATTTCCGAATTCAGTGGTGCTTAACTCTACTAC

>RXA00749-downstream  
TAATCGTTTTTTAGTTTGAAACA

>RXA00750-upstream  
TTTAAACAAAAGCGATAACAATGAACCGATGGTGCTACGACAGAACCGACTCCCCCACC  
CACTAACACCCACCAGAAAAATAACACCTCGACCGAACCT

>RXA00750  
ATGGACTGGTCGATCATTATTAATGTGCTTGCCGTTGCTACTGTCGTGATACTCACCCCT  
ATCATCGCAGCTGCATTATATAGGGGTTTACACGCAACAAAATAAAAAAAGCTTGAAGCT  
ATACGAGAAGCCCAGCAACACGAACGCGACAATCCCCTATCCGATTGCTGATCTTCGC  
GGCATCATGGATACTACCACTACATCTACACCGACGTCATGGTTACACGTGCACATGAA  
CTCATGATTACTGCACCCGCATTCTTTGATGTCACCTCTCCCCGAAGCAGTGCTCTACGAA  
GATACTAAACGTGCTGCTCATGATGCCCTTAAACGGCTATAAAGACACCACTGTCGCTAGT  
GCAGAGAAGATCATGCTTGTAGATGCAGTCACCGCAGCATGGACTCTCTATTCCACAAA  
GCAACACCCGGATCCACG

>RXA00750-downstream  
TGATCCGAGAGCCGAGTACCGCT

>RXA00751-upstream  
CGCAGCAACCCCGTCCATGAGGGCAGGGAACGCCACACATCCTGTACCTATACTGTGAGG  
TGGCATAGAGTATCTCTAATTTAGAAAGTGGTGTAGAAGT

>RXA00751  
ATGTTGGTACGTTACGCACGTTGGTTACCGCTGCACTGTCATGTTCACTGTTGTTTCGGA  
GCAACGGTAAATGGCACGGGTGTTGCGATTGCATATGAAAATGTGTCTATGGCTGCTCAG  
TATGAACCACGGTATGAATCCCTTAGAAACGCGTCTCGGTTCTAGTGGAGTCTTTCCCAAG  
TCGGTTGAACAGTCTGTTGAAAACCTTGCTGAATTACCAGAGGAGACTCGATTTTACTT  
GAGGGTGATTTCGTTTTCAATTATTATTGATGATGGTCTGCTCGCTTCTCGATTGGACCCA  
AATACAGGGGAGATTCGACATACTCTTGGGGCTTCGGGGATCAGCTACACCCCTGGTGAA  
ATGAAACGATCTTATACAGATCGAGTGACTGTCAAGGTGGTCTACCCGTGATGGGTCAATTT  
GATAGAGTGACACCCCATTCAGTGGTTTATGTGGCTGACAGTATTTACTACGGCATTGAA

AGCACGGGTTATCCTAAAGTCCGCAATGGTCAGACTGTCAAGATCCCATTGAGGGTGACG  
GATGGTGGTACAGGAGCGGTTGGTGGGGTCCCACAGGGATCGAAGGTGGTCCGAGATCGT  
TACGGCTCAATTGAGAATGCGGAGTTGATGGGTGCAATCATTCTCATAGATGAGAAGACT  
GGCGATCTCACCTTCACGGCGCTGATGATCGAACCGGTCAACTGTGGTTTCGTACAGAA  
GTGACTTTCCCGGATGGTTCGGACTCAGAGGTTCAATATGTGATCGAGGTGACGGATCAG  
CCTGAACCTGTGGATGTCATTGCTCCTGCCGGATCGTCTCTGAGTTCT

>RXA00751-downstream  
TGATTTATGCCTGAGACTTAAGC

>RXA00752-upstream  
AAGGTCAGCCGTATTTCCGGTCAGTCAGCAACTAACTACGCTTATCTTCCGTGTACGATAG  
ACCGTAGTTAACATAAGGAATGGAATAGGAGAATTGCCGGC

>RXA00752  
ATGTATTCGACAAGCTGATTCTCTTGTTCCTTTCTGAGCAGGATTCAAGCTATGAATGC  
TGCGTAGGTTTATTAGATGGCTCAGATGGACTTGATTATATTGAAAAGCTTCTGAAGGGT  
AGGAAGCTGAAGAACCATTTTCTTGAATGGGAAGATATTAACAAGGCTGATGTTGCTCGT  
GAAGAAATATATAAAGGGCAATTGGTGCATCTGGTGTGTTGTGACGGCTCTTTCCACGCCT  
GGTGAAATTTCTTTTGTGTTTTCCAGGTCAATCTCTTATGAGTGCAACACTCGAAGAAGAC  
TTTGCTGCGCTTGTGCTCGAAGAGGAGCGCACATCTTAGACCTGAACTGTCTCACCTG  
TGGTCACTCCCGTAGGGTGGGTAGCTCCGGGGCTTGAGGGTTTCGTGGAGCGTAATTCC  
GAGGCAGCT

>RXA00752-downstream  
TGAACCACCGCTTTCTGAGCCGG

>RXA00757-upstream  
CAGGTTTAGCGAATTCAATTTCTACCACTGCTCGAGGGGAATGTGCTAATTCAAGGGTTG  
TGACCTCGAGCAACTTTTTATTCCGCTCGATCAAAACAAC

>RXA00757  
GTGAGTTTCGGCGTCGTTAAGCGCCCCGATGCGTGCTACGCGCTTTTTGCCATCCTGATC  
AAGCGCAACCAGGCGACCGCGGTTTCTGCGCCAATGGCGCGGCAGCGTCAGTGGGTGTGTC  
CACGCCCCGGCGTGACACTTCGAGCGTGTAAACCGCTCCGAAGTTGAGCTCTCCGCGCTG  
CTCGGCGGGCGTCGAAAAGCTCTCCGATTTCTTGGCTGAATACTTCCAGCTGGTTCGAGATC  
GGGGCGGGAATCCGAATCTACCTTGATGGCGACGGCGGATTTTGACCTGCTTTGGTCAC  
TTTCAGGCCCTCGAGGTGCAATTTGTGGGATGCGGCGAGCGGCTCGATGAGCGCAGACAG  
AATTTTCAGTGGTTGGAAGCCATAAAGACAAGGATAACCTGCCGGCAAAAATCATCGGG  
CTATTACACTGTGAAGCCATGCGTAGGCGTATCCCCCTCTGTCTTGGTGTCTCTCTCTG  
GCTGCCTTTTTTGGTGGCGTGACCCCCCTCCCCCAATCCGAATGCGGCGTTGGCCCAGATG  
TATCAGGATGCGCTTTTTGATTCCCAGGCGATGTGAGAGGCCGAGCCTGAGCTTGCCACT  
TTGCGCAGTCAGCACGCAGATGAATTATTGGCCGAGATTCCGGCTATTGTGGCTTTGAT  
GAAGGCCAGGTTCCGGAATCGTGCCAGGTAACGGTTCCTGCGATCGCTATTCTGCCCACC  
GATGATCCAGAGAAGTATGTCAACGACAGTCAGGCGTTGATCCTTGATAATTGGATGAC  
ATTCGCGAAGATTCCGTGGCTTTAGTGGTTGAGCAATACATCGCGCAGGCGGAATTGCT  
GAAGGATCTGAGGTGTCCGTTCCTGTTGATTGAGGCTCACCGAGGCAGAATTAGCTGCT  
GCGAAGGACTTGCGGACCGCGAGTTTTCCGCGCGTGCTTTGGGCGTGGCTTTGGCT  
CAGCTTCCGGAAACCGACCGGAGGAGGTGGAACGCGGATCAGCAACCACCATGACCGC  
GCGTCGAGCTGCAAATTATTACCTCCGGCACTACCCAGCGCCAGGTTACGTGAGCGAG  
CTGCCCCGACCCACCGACGAGACTTCAGCGCGAAGCAACATTGAAACCGTCGAAAACAAC  
GTCACCCAGGCCTGGCATGCAGCTGCAAGCGCCGCAACCACCGACGCCTGGCGTGTCTTC  
TGCGCGCACATCGCCGGCGATACCGCACGCGAATTAACGCTTATCGACGTCTCC

>RXA00757-downstream  
TAGCAGTTTCACTGCCAATTTTT

>RXA00763-upstream  
AGCGCGATTTGAGTGCTTTTAATACGATCGGAAGTATTCATGTCCCCAGGTTAGCCCCAA



GTTTGAATCTCTTGCAGGAACGTGGGGTAAAGATATAGAT

>RXA00763

GTGGAAAAATCCAGAAAACGACTTGTGACCATCGCAGCATCGACAATTGGGGCCGTTGCG  
GTGGCTGGCGGCGCTTTTGGATCGTTGATGCTTCCATCGCTGCGCACGCGGAACGCAAC  
TTGTCTAAAGCAGTTGCGGAATCCGCAGATCTTGAACGACCCGCGAGTATTCCCTCGGC  
AGCTCCATTTACTCCACGCGCTTTTACC GGCAAACCTCGACTCCGTAAGCATCGACATG  
CTGGACGTGGAAATCCCCGGCGTCGGCATGGTGAATGCACGCACAGAGGTAGAAAGCGTG  
GAAGTCTCACGGGATCAAATCCTCTCCGGTGACCTCGACGGCACCCTGCGGAAACCTTC  
ACGCGCACATTACGCATGGACGGCGTCGCAATCGGCGCGCAGCTCGGAATCACCGACCTC  
GACATCTCCACCCCATCGACATCTCCCCCTCCGGCGGCATCACCTCAGAAGCGCTCCTG  
ACAGGAACCCCAACAGACATGGAAGACCCGTCAGTGTGCTGGTCAACCTTCGCCTAGTC  
GGCTCAGAATTCCAGATGCTGCCGTACGAGCTTATCGACGCACCCCTCCGGACTCACCCCTC  
GACGATGTGCCCCGACTTCACGTGGAAAAATCGACACCCTGCAACTACCCCTCGCAGAT  
CGGGCAATGGCGGTTTACCTATCTGGTGGCTCCGTCCATTTCCAATCTGAAGCCCGCAAC  
GTCCAGCTCACCACCCGCGAACTATCACCCTAGCTGCACCGGAAGAAAACCTCCGATGAA  
TCC

>RXA00763-downstream

TAGATGCCAAACGTGCGCACCCG

>RXA00765-upstream

ACGGAAGTTTCTGCGTCTGCGTGGTTCGACTCAGGATTGCGAATCAGAAGAACATGCAC  
GTTATCTAAGAGTAGTGCCAAACGCTAGTCTTGAGTGTC

>RXA00765

ATGAGCGAAAATTCCACCCCTAATAATCCAGTCGTCCCAGGTGCAGGCGCAGACGGCCCA  
TCACTGTCCGATTCTGCAAGCATCAGCGGATCCGACGCAGTAAACCTCGCTGCCGAACAA  
TCCAAGAGCACCGCTCACCGCAACATCCCAGGCCCTAGGTGACCTTCCTATCCCTGACGAC  
ACCGCTAACCTCCGCGAAGGCCCAACCTCCACGACGGAATCCTCGCGCTCCTCCCTCTC  
GTCGGCGTCTGGCGCGGCGCAAGGCCAAGCCGACACCCGAGAAGACGGACAATACGCATT  
GGCCAGCAAATCACCTTCGCCCCACGACGGTGAAAACCTCCTCCTTCGAATCCCGCATG  
TGGAACCTCGACGAAGAAGGAAACCCACCGGCGTCGACCAGCGGAATCCGGCTTCTGG  
CGCATCAATCTCAAAGATGAAATCGAATTCGTCTGCACCCACGCCGGGAGTTGTAGAA  
ATCTACTACGGCCAGCCACTCAATGAGCGCGCCTGGCAGCTTGAATCCGCATCTACCATG  
GTCACCGCCACCGGCCCATCCACCTTGGACCAGGAAAGCGTCTCTACGGACTGCTTCCA  
ACCAACGAACCTCGGCTGGGTGATGAGCGTCTCGTTGGCGACGCCCTCAAGCCACGCATG  
TCCGCACAGCTCACCCGCGTGATCGGC

>RXA00765-downstream

TAGTTTTTCTAGTTCACCGTCA

>RXA00767-upstream

TCAAGCGCCATAACGCCTGATTATGCACGGTTAAGGCGCATCTCGCTCACTGGTGCTAAC  
CACTTGCGCTTTTGAAGGAATAACCCCTCCTGTGATG

>RXA00767

GTGGGTACTATCGAAGACGTGGCTAACGAACAAATCGAGGTGCGGAACAACACTGATCAG  
ATTCTGCAGGATACAAGTCCCCCTCTCTTTCTAGAAAGTGGTGGCGCAGAAGCGCAGGGC  
GCTGCTGCTCAAGCAGGTACTGAAGGTGTCGCGTGGCATTACGGTTCCCCCTCTCGTCGAG  
CAACGCATCTTCGAAACTGGCACGGGCTTAGTTGACCGTTCTAATCGCAAGGTGATCAAA  
GTGCAAGGGCTGATGCCCCACGTTCTCTAATAATATTTGTCCCAAAGGTTGATTCC  
GTTGAAAACGGCTTTACTGCCGTGCCCTGGATTTGGATGCGCAGGGTTCGTATTCAACAC  
ACAATGCAGGTAACGTGTCGTCGATGGGGTTTCTACCTCGACACGTCCGCGGGCGGAGTTT  
GATACCCTCATCGGTTTCTTGACCAAGATGATTTTCTGGTCGGAAGTCACCGTCCAGGAA  
GCCGATGTGGCGATCATCTGCTCGGCCAGGAAATGGCCCTCCGGACGCGGTCTTT  
GCCGATAGGGTCGATTGGAATGGGCCATCGCGTATCGACGTGCCATCCGGCGTGAAAAC  
CTGGAGGAGGGCTGCAAGCTCTTAGAAGCTGGCGCAAAGCTCACCGGTCTCATGGCT  
TACACGGCCCGAGCGGTGAAGGCGTTGGAGCCCGCTGCGGGCGTGGATTGGA

>RXA00767-downstream  
TGATAAGACCATTCCCCATGAAA

>RXA00768-upstream  
GACGTCGCCATCCGGCGTGAAAACCTGGAGGAGGGCGTCGACAAGCTCTTAGAAGCTGGC  
GCAAAGCTCACCGGTCTCATGGCTTACACGGCCCCGAGCGC

>RXA00768  
GTGAAGGCGTTGGAGCCCGCTGCGGGCGTGGATTTGGATGATAAGACCATTCCCCATGAA  
ATCCCCCATTTGGATTGGCCGTGGCGAACATTTAGGCGCTGTGCATTTGACCAAGGGTTGC  
TACCGCGGGCAGGAACTGTGCGCGCGCTTGATAATCTTGGGCGTTCCCCGCGCGTGCCTG  
GTTCTGCTTCATCTTGACGGTTCGCGACCGCTGGATCCTGTGACTGGCGCTGAAATCAAG  
GCCGGTGCAGCGCACCGTTGGTCGCTGCGGACCGTTGTCCATGACGCCGATTACGGGCCG  
ATCGCTCTCGGGCTGGTTAAGCGCAGCGCTTTGGATAAAGAACTTCACATCGATGATGTC  
TCTGTAAACGTCGACCGCGATCTGCTTCCTGCGGAGGAAAGTGAACAACGCGGACGCGCA  
CGCATCAATAAGCTCAAGGGTCTT

>RXA00768-downstream  
TAACTAAAACGATTTATAGCGAA

>RXA00769-upstream  
GGCTATTGTGTCTATCAGGAATACAGTTAATACATCTTGAAAAGCCCATGGGCCATCCGA  
ATTCCCAGGATCGGCCCCGCTCACTCCAAGGGGGTCAGGCA

>RXA00769  
ATGGGTCGCGGTCGCGCGAAGGCAAAACAGACCAAAGTTGCTCGCCAGTTGAAGTACAGC  
TCTCCAGACATGGATCTCGATTGCTGCAGCGGGAGCTGGCTAACCAGTCTCCTAGGCGT  
TCCTACTCCGATACCCCTGATGATGAGGACCAGTACGCAGAGTATGCGGACTGGGATGAG  
GACGACACCGACAATCGTGCCTACGGCACAAAC

>RXA00769-downstream  
TGATTTTCGTGTGTCCTTAACTCT

>RXA00771-upstream  
TACCCCTGTTTTGGAGAATGCTCCGAGCCAGGGGTACTTTTCTTTTCCTCACACACAGTA  
GCTGCTGAGAAAAATGAAGACCTTTTGTTAGGTTGGGAGT

>RXA00771  
ATGACCAACCCATACGAGGCCTTCATACCGCTCAAGCATCGTACGGGGATTGAACCCGAG  
CACACCTTTTGGGAATGGGAAAACAAAAGGGTTACATTTGCAAGGAGACGTCGAGAAGCG  
CCCGTCCGCGTTATCGTGGTGCATGGGCTAGGCACCCATAGTGGCGCCCTCTGGCCCCCTC  
GTCGCGGCCATTGAGGGCGCGGACCTCGCCGCGATCGACCTGCCTAAAACCTCCGCTTTAC  
GACGATTGGCTGCGCCTTTTAGAATCTTTTCATCTCGTCCGAAGACGACGGTTCGGCCACTC  
ATCCTGATCGGTGACGGCACCGGAGGCTTGCTTTGCGCAGAAGCTGCACACCGCACAGGA  
CTGGTTCGCACACGTCATTGCCACCTGCCTGCTCAACCCCTCCGACCAGCCGACGCGCCGG  
GCACTGTTTCAGGTTTTACCCGTGACTCGGTTGATCCAAGGCCGCTTGCGCAACCGCGAA  
ATTCCCCTGACACAGAGTGTGTAACCTTCAGCAAAATCAGCCGACGCCAGCCCTGAGCAAA  
TTGTGCGCGGCCGATGAATTTAACGGAGCATTCAAAAATAACCTGGGGTTTCCTCGCGTCA  
TATGTGCAACACAAGGCCAAACTGGGTGCAGTTCCCCTCACTCTGATGCACCCCTGACCAC  
GACCTTTTGGACTCCCGT

>RXA00771-downstream  
TGAGCTCAAATCTGCGTACGCTT

>RXA00781-upstream  
TTTCTTAGGAAATAAAACAGGGTGTCTTTGTGTTCAAAAGGTATAAAGGAAGAGTAGTTC

CGGTTAATTCCACCGGGATGAGATACCGAGGAGAACGCAC

>RXA00781

ATGAGCGAGAACAAAAACATTGAGATTGTCCACAATGAAGGACAGAAGCGCTTTGTTATC  
AGCGTTGATGGAACGCCAGCTGGATTGTGCCAGCTATTTAGACGGCCCGGATATCCGCAAC  
TTCAACCACACTGTTATTAAGCCTGAATTCCGTGGACAGGGACTGTCTGCGCCATTGATC  
AAGTTTGCTTTGGATGATGCACGTGAGTCCGGTATCCGTATTCATGATGCTTGCTCTGCA  
GTCGCTGGCTTCATTCAGAAGAACCCTGAGTATAAGGATCTAAAGAAC

>RXA00781-downstream

TAGCTGGCACAGGGGGGTGGTTC

>RXA00785

ATCATCGCTACTCTCGGTGTGACCTTGCTGGTTGAGGCCCGCGGATTATTCTTGACGGTT  
GCGTCCATTCCCATTCTGTTTGGTATTTTACACCACTGACTTCGTGGTTTGTGTCCCAA  
CAAGGCGTGGCTGCGAATGTGTCCCTGGTGTTCCTGTCACGGAAATCCTCACGGCTGTT  
TATCCTTTGGCGCAGTTGTTCCCCACCCTGATCATGGTCACTTTGGTGGCGGCATTGATC  
GCTGTGGTGGGATTATTCTGCTGCGCAGGAACCAGGAATCTCGTCAGGTTTCTGGGGAA  
CTTACCCGGCGCGCAGCGTGAGGCTGAGGAAGCTAATCAGAATGCTGCTCGTCGTGCT  
CGCGCACAGAGCACGAGGGTACAAAGTTCTAAAACACGTAACCGTCGCGCGCAACCAACC  
GGCGATACCGGTTTCAAAAGTCACGGTTGATGAGTTGATCAGGCGTAGCCAGGAGCGCCGG  
CAAAGTGTGCGCAGCGCAAACTGAGCGCGGTGTGCCGTTTACTCCAACTCCGGGTCTCT  
GTGGTGGCCCCCAAGCCGCGCCCGAGCGCCCCCTGAGGCGCCGGCTCCTACGGATGTGGGT  
GAGCGTCGACAAGCAGCCCCCT

>RXA00788-upstream

CGCATCCCTCTAGTTTTCCATCACCTCAATGAACGGCGCTAACTCCGGTTCATTGCGCAA  
TTGATCCAGCACTGCTTGCAGTGAGGCCTCATTAGTTGGC

>RXA00788

ATGGCCTCCTCCATCAACATCGGAGTGTTCAACCTTGGAATGCTGTTGCTGCCTGGCTT  
GCTGGTGCAACCATCACCACTTCCCTTGGACTCACATCAGCCGGATTAGTTGGCGGTTTG  
ATGACGTCCCTCGGACTAGTGTGGCCATCGTGGCTGTGGTTTTGCCTCGAAAAGCGCAA  
GGCACCCAAGCGACCATCAGCGTTGTGGAGCACCAGCCCGCCCAA

>RXA00788-downstream

TAAATAATTTCTCTCTTCTAATT

>RXA00795-upstream

TTTGGATTCTGGACACCCAAAAGGGGGTTTCGTACCAAACCTCGTGACATACTAGGCGGGT  
GGCTGAGAAACGACCGAAAATTTTGTATGGCAGTCGAGAC

>RXA00795

ATGATTATCTCGTTGGTAGTCTCCGCGATCATCATGTTGGTAGCGGTGGGATTCACGGGA  
ATGTGTTCTTTCAATACAGGATCCCCTGAAAATGGGCAGGTACCTGAAGTTGATGCTTCC  
ACTTTTATGTCAATGGAAGCGCGCGCAATGACTGATCATGCAACTAGGTTGCCGGAACT  
CCTGAAGGCTGGACCACAAATTCAGCTCGACGCACCATGGTGGATGACACCCCGGCATCT  
GTAGTTGGATATGTACCCGAGATGAGGGCTATATTCAGCTCACTCAAACCTGGTGAAACC  
GTTGAGGATGCTGTGGCTGGTTATGATACCTCGCTGGCGTGATCTTTCTGAGTCTTATGAT  
CTTGATGGCCACGACGTGGGAATTTACACCTCACAGGAATCTGATGTGCGTGATCTGCGT  
GTGATGGATCTGGGCGATGCCCGCGTCATGGTCTCGGGTGCTGCTACCGATGAAGAATTC  
AATGATCTGCTTCGCGCAGTTGCGAATTCGGAGCCACTGCCTACCAAT

>RXA00795-downstream

TAAGAATTGGTTCGAACCAACAAA

>RXA00804-upstream

AATCTAGTGCAAGTTCCAGCGAAAACCTTCCAAAACCTGACCAAGTTTAAGAAGATTCGCT  
ACCCTATGAATCAGTTGTAGGAGTAAGAGGGGAGTTAGAG

>RXA00804

ATGAAGATCAGAAGTGCACGTGAAATCGCGGAGTGGTTTCGTTGCCTGGGGAGATGAACTC  
GATGCTGAAGTCTCCCTTTGAAATTGCAGAAGCTCCTTTATTACTCCAGGGTGAGCAT  
ATAGCTGCAACAGGGCGAAAACCTTTCTCGGATAAGATTCTGGCGTGGCAGCACGGACCT  
GTCACCTCCGGGCGTTTATTTCAGATACAAAATCATACGGCCGAAACCCAATTGATCCTGAT  
GAGTTTGTGTCAGATGAATTTAACTGGGATGACTACTCAGATGTGTCAGATGAGCTTGTA  
ACCGTATGGCGAAAATACGGCATCTATTTCGGCGTGGGCACTGAGGGAAAAAACTCACAGT  
GAATCGCCGTGGCTCGATGCCCTGGGCAACAAGGGCAAAATATTGAAATTACAGATGCTGCG  
CTGAAAGATTTCTTCTTGGTGCAAT

>RXA00804-downstream

TAGAAATTTGAAAAAGAAACGAA

>RXA00805-upstream

TGCTCCGCTGACAGTGGTGCGCTGAGCAGCCCAAAGAGACAAAGCGCTGGTTGAGGGC  
ATATGGGGAAAGCGTGAAACTCTGATAGGGTGCCATATCC

>RXA00805

ATGGCAGAAAGTTTTATAGAGGTCTCGGCGGGGCATGCGGATCGGCGGATAGATAAGTTT  
TTGCGGGCACAGCTAAAGGGCGTGCCGCGTTCGTTGATTTTCCGTCAAATGCGTAAAGGC  
GACATTCCGGTGAATGGTTCGTAAAGTGGATCCGAATTACCGGTTGCAAGAAGGCGACCGA  
ATTTCGAATGTGGCAGATGGATTTGCTGGCAGATTTGCCGCCACCGGTCGTCGATAAGCAT  
ATTTTTAAGGCTGTGCGACAGCGTGCTTTTTGAGGACGCCGAATTACTGGTGATCAAT  
AAGCCAGCTGGAATTCTGTGCACGGTGGCAGCGGGCACGGCGGTGGCGTGATTGAGGCG  
CTGCGGCAGAAGTTTCCGCAGGAACGCGACCTGGAATTGGTGATCGTTTGGATCGGGAC  
ACCTCAGGTTTGTGTGCTGGTTTCTAAAACGACATCTGTGTTGCGCGAGTTGCAGGAAATT  
TTGCGAGACCGCGAAGAGGAGATTTTTCGGGGGTATTTACTCAAGGTCGAGGGGGCTTGG  
CCTGGCGATTTGCGACAAATTGATGTGCCGTTGAAGCGGACGGAGACAACGTGTGTGCCA  
CATTCGGATGGTTTGCGGCGCGGACGTATTTTGAGGTTGTAAAGCGTTTGCCTGGGTGCG  
ACCTTGGTGAAGGCGCAGTTGGCGACCGGGCGGAAACATCAGATTCCGGGTCCATGCGCAG  
TATGCGGGTCACCTATTTGTTGGCGATCCACGATACGGGTCGCGTGGGGGCGAGAGCTGCG  
ACGATGCATTTGCATGCGGCGGAATTGGTGGCGCCTCGTGGGGCGGGGAAGCGTCAGAAA  
TTCACTGCACCGTTGCCGAAGGAGTGGGGTATGGGACGGGTC

>RXA00805-downstream

TGAGTCGGGCCTTCGTGGAATCG

>RXA00808

GCTGGCTTCAATGAGATGATGCGTGGCCTGCGTGAACGTCAGCGCGTCCGTGACCTTTTC  
GGTCGCTACGTGGGCGCTGAAGTGGCCAAGCGTGGCGTGGAGGAACGCCCACTCTGGGT  
GGCGAGGACCGTAAGGTTGCCGTGTTGTTTGTGATGTCATCGGCTCCACTACCTTTGCC  
GTCAACCACACTCCTGAAGAGGTTGTGGAGGCGCTCAATGAGTTCTTCGAGCACGTGCTG  
GAGGTTGTGCACCGCAACAAGGGTGTATCAACAAGTTCCAGGGTGACGCGGCGTTGGCG  
ATTTTTCGGCGCTCCCTTGCCCTGTCTGATGCCACCGGTCATGCGCTTGCCTGCCCCGT  
GAGCTCCGCGCAGAGCTGAAAGATCTCCAGCTCAAGGCCGGAATTGGTGTGGCTGCTGGC  
CATGTGCTTGTGTCATATCGGCGGTACGCGAGGTTTGAGTACACTGTGATCGGCGAC  
GCGGTGAACCAGGCTGCGCGCCTGACGGAGATCGCGAAAACGACCCAGGCCGACCGTC  
ACCAACGCTTCCACGCTGCGTGAGGCCAACGAGGCGGAGCAGGCTCGCTGGACGCTCATG  
AAGTCCGTGGAGCTGCGCGGACGTAGCCAGATGACGCAGATTGCGCGGCCTATTTCGGCCG  
ACGTTGGCGGATAGGTCC

>RXA00808-downstream

TAATACGCTTTTCGACGCAAAAA

>RXA00812-upstream

TTACAGGTGAGCGTATCGCGGGCGGTTGAGAGGTGAGTTATCCACAGGCCGAGAGGGG  
GTCGTTGAAAGCACGTAAGCCTCAGGCCACAGTAGGTGCC

>RXA00812

ATGAACACCATCACACACCAAGCAATTCTCATCGCAGTGGGAAGATCCGGTCCCTGCACCCA  
GAGGCCATGCACGTAGCTGCAGCCACTGGTCCGCCGGTTATTGAAACAACAAATTTGATG  
GACATCTCCAGGCATTTTACCGCACATCGGCAGTGTCTATTGATGCGTCGATGGCCTCT  
CAATTATCACCTGGGAAACGCCGCGACAGGGTGTTCCTTCTCGATTCTGATCCAGGGCCC  
TCTGATTGGAAAACGGCGATGAAAATCCACGCTGAGCAAGCCATGTTGCTTCCCCTCAG  
GCAGGGGAGTTGCTCAGCGCTTTAGGCAGAGATGACAAACAACCTGCCGGTGGCTTCGGGC  
CATGTTCATCGGTGTTGCCGGGGTGGTGGGAGGAACAGGCGCGAGCACGTTTGCTGCGGCG  
CTCGCAAAGCGGCGTGCGGAGTCAGTCACCACTGTGCTTATCGACGCCGACCCTTCCTCT  
GGCGGCATCGACCTGTTGCTAGGAATCGAAGATGTGCCCGGCGCGCGGTGGCCTGATGTG  
GGGTTGCGTCGCGGAACGTCCAGGCTGCTGATGTGTTGAAAGCGCTGCCGAGCACTCCT  
GATGAGGTGCTGGTGTGTTGCTACGGCGCGGTCTAATATTCTGGATCCTTTTGATTATCC  
GAGTCTGATGTTTTCAGCGGCGATTGATTGTTTCTTAAGCGCCGATAGGTGCGGTGGATGTG  
GTGGTGGATCTGCCTCATGCGAGAGTGCATCCAGATATTGCGGAGCGCTTATCCCACCTG  
GTGTTAGTCATCCCTGCAGAGGTCCGAGCGGTGGCTGCTGCCAGGGCTCGGTGTCTGGAA  
TTACAACAATTGCATGTATCCATCACGTGCGTGTGAGGCATCGCGGGTGGTCAGGTTTG  
GATGTTGCAAGTGGGAAGAGATTTAGGTGCGGATATTACCGCGGAGGTTGGCTCGATC  
CAGCGGCTGGCTAAGTCCGTGGAGATGCATGGGCTGACCGGTTCTTTGCCGAGGGTTTA  
AGCTCAGCATGCGACGCGGTCTCGGGGAGGTGGCGGCA

>RXA00812-downstream

TGACTGACATTGATCTGGTGGTG

>RXA00814-upstream

GCCGCAGGCTAGCTCAACTCGGGGTGCTCCGCCGAAATCCTGTGACCACGCAGGTGGTGT  
GGGATTTGGACCACGGCATGCACGAAGGGAGCGAAGAGGC

>RXA00814

ATGGTTTATGCCCTAGGCCTTCTTAGCGTGGCGGTGTTGATCTCTGGTTCAAGGGGCCCC  
GGCGCGCGTACCAGGCCACCAACACCTGGGAATGGCGTCCATCTATTGCCCTAATTGCA  
CTATTTTGCCTGGCCACAGTGCTATTTATCGTCTGTTGACGCCTACACGATGATCGCCGGC  
ATCATCATCGCCACAACCTCTATTCTGGTATCTCCGCCAGACACACGCCGCGAGCCCAACGC  
ACCAACAATCCCTCCAATTAGCCAGCTTCTTAAGCCTCTGCGCAGGCAATTTACGCGCC  
GGGTCACCATGGTCGACGCCATGGACTACGCGCTCGACAACACCACGCCGACAAATT  
TTAAGCCCCACGTTGTCAGACCGCAGCCAGGCAGGCGCGCTCGGGCGGACGCGGCCGGA  
GTGCTTATCGACGCCTCCCTCCCCGATCTTCAACGCCTCGGCCATTTGTGGGAAACATCA  
GAACGACACGGCATCCCGCTGGTCGCCCTCATTGATCAAATGAGGTCCCGGATTTTCATCG  
AAGCAACGCCACGGCGAATCCACCCGAGCTGCACTCCAAGGACCGCAAGCAACCGCAGTG  
ATCCTTACCGTGTTGCCACTAGCAGGAATGCTCATGGGCACAGCCATGGGAGCAAACCCC  
CTTGGGCTACTCACCGGTGGTGGGATCGGTGGGTTTCTGCTTGTCATCGGTGTGGGCCTC  
GATGCTGCAGGGTTTGTGCTCACCCACAAAATTCTCCAGAGCGCGAGCCCCCTCA

>RXA00814-downstream

TGATTACAGCACTAGTTCTTGCA

>RXA00815-upstream

CCGGTGGTGGGATCGGTGGGTTCTTGCTTGTCATCGGTGTGGGCCTCGATGCTGCAGGGT  
TTGTGCTCACCCACAAAATTCTCCAGAGCGCGAGCCCCCTC

>RXA00815

ATGATTACAGCACTAGTTCTTGCAGCAGTGGCCATGTTCCCTCGGTTACCCAAACCCTGGA  
GTTTCGCGGTGGATTGATAAGCCCCAAATCCGGTAAAAGCCTGCGTATCCGAGCTGGCCCA  
AAAAAGCTGGGCAACGCTGACCCAGTGGATGTCTCTGCAGATATCGAACTGTTTTCAGCG  
TGTTTGGATGCGGGTTTAAACACACGTGATGCAGCGCAGGTGGTGGCTCATGTTGCAGCC  
ATTACGCACCGCAACTGTGGACACATGTGGTGGCATTGCTATCGATTGGAGTGAGTGCC  
CCTCAAGCATTCGCCCTGATGGCAGGAGTTGATGGGCTGGATGAACTAGCCAATTTAGCC  
ACCGTGTCGCACAGGTCCGGGAGTGCATTAAGTGATGGGTGCAGGAACATTTCCACCTCG  
TTGTTGGCCTCTGCTGGTGACAAGCGCACCGCCGAGCAGAACGCGCAGGAGTGTTTCATC

GCCCTGCCACTTGCTCTGTGTTTCTCCCCGCATTCATGATTGTCTGGGCTTGCACCAAGTG  
GTGCTCAGCTTGGGTACGCAACTTATCAATTC

>RXA00815-downstream  
TAGAAAACACACACAGGAGAAAA

>RXA00816-upstream  
ATGCTCACCGCAACAGCCACTATCCCGGCACCGATTGGGCAGGTGAGCGCGAGTGCGGTG  
TTCCCGGTGGAAACTAGCTGTGCAAATGACGAAGGCTAC

>RXA00816  
ATGACCATCGCCAGCGCTGGTGTGCCTCCATCCTCATTAGCCTGCTGGTGGTGTGCGCC  
TGGCAGGCGGGAAACCTCGTGGCCAGGGAACAAGCACAGGTAGCGGCCGATGTTTCAGCT  
GTGCGCGAGCCTACGCCTTTGCCCCGCGGGAACTACCCGACGCTGCCTGCGCCACCGCG  
AAACACACAGCCGAAGCAAACAACGCACAAGTAGAAAAGTGCACAGAGAGGGGAGGAT  
CTCAGCTCACCGTCACCGTTCGTGGACAAGAAGCCACGCAAAAGCAGGACCTTTA

>RXA00816-downstream  
TGAGGTTCCCAACAAGGTCACCA

>RXA00826-upstream  
TCGGCGCGCGCATCTGGTGTCTATCTTGGTGTGTGCTGCCATTTCCGCGATCGCTCTAA  
CCGTGTCCATTCAGACTGGTTTCTTTAAGTTCTTGGGCAC

>RXA00826  
ATGATCACAGTTTTAATTGATGGACAATCCGGTGCAGGGCAAAACCACCTTGGCGGGTGAG  
TTAGCTGCCCCGACCGGGTTTCAGTTGGTTTCATTTGGATGACTTTTATCCTGGTTGGACT  
GGCCTTGAAGCGGCATCGGAGATTGTTGCACGCCATGTTTGGACGCGGACAACCCCGGT  
TTCTTCACGTGGGATTTGGCACAACAATTGCCAAGGCGATTGGATCAAGTTGGAGCCTGGT  
CGAAGTCTCATTATCGAAGGCTCTGGATCAATCACTGCTGCAACAAAACGCAAGGCATCG  
CTGTTGGGCGAGCTGGTGACCGTTCGTATCACTGGTCCGAGGCTTTAAGAAAACAGCGC  
GCCCTCAACCGCATCCTGATTACGCACCATTTTGGAAAGTGTGGGCGCAGCAGGAGCAA  
CGCCATTTCTCTTTAGGCGTTGAGGTGGATCATGAGATTGTGCTAGGTTCTGATGAGGCT  
TCGGGACGACCCGAAGAAATCTATGACAGCCTGGGAACGGCCAGAGTTCT

>RXA00826-downstream  
TAAGAAAGTTTGACTAGAGAACA

>RXA00830-upstream  
TGATGGTGGCTCGATTGTATTTCGAGGGCAGCCCCGCGGAACATCAAAACTGATACTCC  
AACAGGACGCCACCTTAAAGCTTATGTAGATTAGTTTCTT

>RXA00830  
ATGGAAAACCTGGTGATCTCGGCGCTATGCCACAGTACGGTTTTTGAGCATATTTTCGATG  
CTCATCACCGCTGTGGTTTTAGCGATTCTTGTCGTCCCCATTGCTCGTCGATTCAACTTC  
GCACCGGCATTTGGCTGGGTGCTACTCATCGCAACACTTCTGTGCAACCTGTGGAATTTT  
ATGCCCCGCTATTACACGCTGGACCAATCTTGGCCATTCCACTTCTCAGATGCATTGCGC  
ATTATTGCTGCCATCGCATTGATTAATCGCGCGCGGTGGGCAGTTTCAGTGAATTTTG  
TGGGGCACCACGATCAACCTGATGTCAGTCTCACTCCAGATGTTTCAGTATTTACAGGTT  
CCCTGGCTGGAGTTTTTAATGTACTGGTTTATGCACATTTCTGTGTTTCTAGCAGCTATA  
ATTCTCATTTTCGCTTTTGGAGAAAAGCCAGGGCTGTCCGGAGTGTTATGTCCGTTGCA  
GTGGCGATTAGCTGGGGCATCATGTGCCTCATGGTCAACGCATTTTGGGAACCAACTAC  
GGGTACCTCTCCACAGAACCAAGATCAGCGTCAATTCTGGATTTGTTGGGAGGATGGCCG  
TTCTACATCGTCGCGGAAGTATTACTCTGTGTGCAGTGTGGGCTTTGTGGTCTTATCTG  
ATTGATAAGCTGCCTATCACGTATCGCCCTGCTTACCGTCCGAAAACTCGGAAGGCCGCT  
GCG

>RXA00830-downstream

TAACCGCCCTCTACCTCGAGAAA

>RXA00831-upstream

AGCTCCAAGAAAGTCAGTGTGTCATGGCTCGGTGCTGCTCATGCTTTTCGGTGTTTAC  
ATGATGAGCATGTTTCGCTGATTTAGGTAGCCTGGTGGGA

>RXA00831

ATGAGTGCACCTTGAGACATTGCAATGGCAGGACTGGTCAAGCGTCTTAATTGTGGTAGCT  
CACCCAGATGATCCGGAGTATGGGCTTTCCGCGGCTGTTAAAGAATGGACAGACGCCGGG  
GTGGAGGTGTCTTACCTGTGCTCACCCACGGGAGGAGGTATCCAAGGTTTAGACCCT  
AAAGAAACCGGGTCATTGCGCGCAGCGGAACAGCGGGCTGCATGTGATGTGGTAGGAGTT  
AGAAATCTCACCATTGGAATCACCCAGATTCCATGTTGGTGACAATCTGGTACTGCGC  
AAAGATATTGCTCGGGAAATCCGGATCCGTAAACCAATGCTGTGGTGGTATCCAATTTT  
GATGTAGAGGCCTACGGTGGTTTGAACCAGGCGGATCACCGCGTGGCGGGATTAGCCGCA  
ATTGATGCGACCCCGATGCCGTAATCCGTGGGCGCAGCCAGAGCTGTTGCAGGAGGAT  
CTGCAGCCGTGGGGAGCTGAAGTCATCATCATTGCCGGACACCCAGAGCCCACCCACACC  
ATGGATCTGGCTAAAGATTCTGTTGATGCCGGAGTTGCATCCCTTCAAGCTCACAAGGAA  
TACTTGGCCGCTCTTCCAGATCCCCCAAGCCGGAGGAGTTTCAATCCGGCGTTTCTCGAG  
GTAGAGGGCGGTTACGCAGCGGCCTTCCGAGTTTTTCGGACGG

>RXA00831-downstream

TAAGCAGGGCGATACGTGATAGG

>RXA00835

TTTGCTCCGTGGGCTCTCACACCAATTTTGATGTGCGGGCGGCTCCTACCTGTGCTTCGAA  
GGTGCAAGAAAGATCTGGCACTCCCTCCACAGGCGCATCAAAGGTGAACAGCACAGCACC  
GAACCCAAAGTCGACGAGAAAGCCCAAAGTCAGAGGATCAGCTGGTCAAAAGTGCCATCACA  
ACTGACCTCATCCTTTCCGCGAGAGATCATGGTTATTTCACTCAATCAGATTGCAGATCAA  
ACTATCTGGATGCAGGCTGCGGTTCTTTTCGTCGTAGGTATTGGCATCACCGCGCTCGTG  
TACGGCGTAGTCGGTGTCTTGTGAAAATGGATGACGTCGGACTTACACTTTCAAAGCGT  
GACTCCCGCAGGTATCCAGAAATTTGGCCGCGGCTTGGTCAAAGCGATGCCCATCGTTCTT  
CAAGTTATTTCTGTTGTGCGGCGTTTTTGCCATGCTGTGGGTTGGTGGCCACATCATGGTC  
GTTGGAAGTGAAGAGTTAGGATGGGAACCTCCCTACCACCTTGTTTACGGACTAGAGTCC  
TGGGCTAACGGTATCGGAGGCAGTGCTCTGGGATGGGTTGGCAATACTTTTCGGGTCACTT  
GTGTTCCGGCCTCATTTGGGGCGCGATTATCACCGTTGTGGTCAGTGTGATCAAGAAGTTC  
ATTCCACAGCGTGCGCAAAACTCGTCTCAT

>RXA00835-downstream

TAGTGGAGAGTTGTTTCGCTGTAA

>RXA00836-upstream

GGAGAGTTGTTTCGCTGTAATTTTCGCTGTACAGTTAATATGACTTTTTTACTGTCTCAATCA  
ATTACAAAGTTTGACAGAAATTTAAGGAAAGGAGTGCCCA

>RXA00836

ATGTATACCCATTCAACAGGCACTCCTCAGCTTGATTTTCGACGGTGACATCTATCCCCCTT  
CACCTCTTCTTCTCTGCACAGACTGCCCAACATTTTCGCTCTCGAGCGCGTCAATTGGCAT  
GTCTTACCGCTATTGTGAAACCTGAGCAAGGCGAACTCATCGTCGAAGCGCTTCTCGCA  
CCAATAGAAATCCGCAACAAAAATCGGTGTTTGGGTTCAAGATGAATTTCTCGGGGTGATT  
GCAGAGTCCCAGTTCTGTTGAATTCTCAATTGTCTCGAATTTTGCCTCTGGCCACCTG  
ATTTCCAGCCAACACTTCTCACACCGAGTAAAGGATCTCTCGTTTCACTTCTTCTTCCA  
AATCTAAAAATTCGGGCTCATCAGCAATGATCCTCCACGAGCTGATTCCACCTCTTACCG  
CTAGGCAGAATGTGGCGCGTTGAGCCACCGTTTCATGCTCTGTTTGGAGATTCTCACTT  
GGCTCCACGATTCTTTTTGGGCTGAGGCTTGATTTAGAAGCCCTAATTGTCTCCTATAAC  
GGAATAGAAATGTGGCATCTTAACTTTGATGACGCCTCAGCACTAAGCTCTGCTGTGAAA  
TTCTCAAATGCAAATGGTCTCACCCCCACGGTGCTCGGCCACGTAGTCCGGGAGAACGGT  
GAAACATCCTTCGAGATTGACGTTCTCCCACTGGAGTTGTGGTCAAGAAGCAGCATCGC  
CTTGAGGTTTAAAAATCCCTCGGTGATACCTAAAGAGGCAGATTCCCAAAATTATGTG

AAGGCGACAGCGCTCCTTTTCAGACGAGATTCTGCGACCACAAACGCTGTCCAAAAAGGCA  
 CTGTCTTTTGTGGACACCGCAGTTAAGTACAGCCCTCATGTTGCTTGTGGCGTGGGGATG  
 TTTAGTCTTTTCGCCGTTATTCCCTTTGACAAGTTGAGTGATCATAGTGCGATGCTGCTC  
 GCAGTCAATTAGCTTGATGCTTTTGTGCTGGCATTAGTAATTCTTTTCAAGAGAATTTCAG  
 TCAACTAATACTCAGCGTTGGAACCTGGCCTCGTCAGTCGGATTACTCGCGACACTTCCG  
 ATTATCATATTCTGCTTGCTGATACATTGATTCTCTCAGGGCAGCCTGGAAAACCATGCT  
 CAACCCGACGTACAGGTAACAACGTTAGCTAACAGGCGGCCAAGTTACCTACCTCACTG  
 GACTCACTAGGCGCACTGAATTCACCAAGTTTCGCCGAATTCCCCGAGCTCATCAATGCTG  
 CAAAACCTCTGAAATGTTTCGCCTCACCACCGATCGCCTCTGGGCAGTCACCGGTTTCGACG  
 TTCCGCTCATGGCTAGATCGATCCATTCTGCCACTCACACGAGAAAATTCCGCTTCAGAA  
 AGCGCAGTGACAGCTCTTGGACCGTCGATAGTGCAGCCTGCATCTGAATCGATTACAACT  
 CCAGCTCAAACGTCGCAAGTTCGCCACGCAATTGACGATGGTGACGACAGTAAAACCTCA  
 ACGGGAAGACCAGCTCCCACTACTAAGTTCGCCGATCATGCTCTTCCCCAACGTTGGATT  
 ATCGGGCCGGAAGATCCAGAATCCACCGACCTACAGCACCAACCGAGCCACCGAGCCA  
 AGCGAACCTGTGCAACCGACGAACCTCAGAGACCTCTGAACAACTTCA

>RXA00840-upstream  
 GCGATTAATGTGACAGGAGGAAAAGAAGTTAACTGAAGTTACTAATGTGACTAAAGTTGT  
 TCCCTCCGCATTGTCTCGTTGAAAGGTAAGTAAACTCAA

>RXA00840  
 GTGACAAAGACACTCCCCGACTGCTTACAGTCGCTGCCGCTCTAGCCATTGCACTCCCG  
 GCAACCCCGGTAGCATCGGCTGTACACCAGTTGAACAAGCTTTCAACGCCTCATCGAAT  
 CTCTCCAGCGGTCTCCCCGTAGACCAATGGGGACGCCCCAACGAGCAGTTCCGCCAACAA  
 ATCGAACAGGCAGTAAACCAACCGTGGGTCCCGCAGGAAATCAAGAACATCGTTTCTCAG  
 GCCATTGGGTTTTATCACCGGTGACGGCAGCGAAGGTGGGGACATTGAAATCCCCGACAAC  
 GCACCACGCATCGCGCAGTTCTTCTGGCCCCACCGATCAGAAAACCTGCATCAACGGAAAT  
 TCTGCAGCCGTAGGATCTGCCTTTCGAGTTCCAGGACCAGCAGATCTCCCCCTCCCCGGC  
 GCAGGTGTGCGCCAAACCTCCTTCTGCTGTTACCGCACTGGGAACTGGCCCCCTCGCAGAA  
 CAGCAAAGCACCGCAATGACTGTTCAATGGGCAAACCTTAAGCAACTTCACCCATGGCACC  
 ACGACGTTGAGCAACACCGGAATCAACCCCGATGGCCCCCTCAACGATTTCCGGTGTGGCA  
 GACACAGGACGCGGCATCATCGTCGCCTCCATGTGAGGCGGCCTCACCACATCCACCGAA  
 AACGGTTTCAGCGAACTGTAATTTTCATCCCGACTGCCGTCGTATTTCGATGTGAGG

>RXA00840-downstream  
 TAAGAAAACAATGACTGATCTTC

>RXA00841-upstream  
 GCCTCCATGTGAGGCGGCTCACCACATCCACCGAAAACGGTTCAGCGAACTGTAATTTTC  
 ATCCCGACTGCCGTCGTATTTCGATGTGAGGTAAGAAAACA

>RXA00841  
 ATGACTGATCTTTCATCCCGTAAAGCAGGAAATTTTCAACACTGCTGAATCCATAAACACA  
 GATCCCAAGGGGTTTCTCCGCGAGGTAGACACCTTCAAAGTAACCGACTTCGGCCTGTAC  
 ATGGCTCGTGGTGCAAACACCCCAAGTTTCGGATACTTGGAAAGCTGGCTCCTCCCAGAA  
 CTTGGATTGCGTGCCAAACATTTTCCACTTCCGCAAAGGCGTGGATGAACGTCAGGATTAC  
 TACATCGATGTGCTGAAATTCGCGTCGAAGACAACATCTGGACCACCCGCGACCTCTAC  
 GTGGATCTCATCTCTGTCTGCGGAGAACCAGTAACAGTCATGGACATCGACGAACCTAGCT  
 GCAGCAACCTCAGCAGGGCTTATCACTGCAGATGACGCTGAGCGCGCAATTGATGCCACC  
 TTGAATGCTGTTGAAGGAATCACCCGCCACGGCGACGATCCTATGCAGTGGCTGCGCTCC  
 AAGGGAATCGAACTCACCTGGGCTGACGCCAGCCAGGTAGAGCTCGTCCCTGCAGAG

>RXA00841-downstream  
 TAACTACTTCCTAACCGCTGCTT

>RXA00846-upstream  
 CTGCGGGAGACTCGGGTAGAAGCGAAAAATAACGGTATCCTCGGGGCTGCGGATGGCTGG



CCTGGGGGAATTTCAAGTGCTGCAAGTTGGAGGAAAAACG

>RXA00846

ATGTTGAAGAATGATCTGTCTGGTGCTCGAGTTGTAGCTGTGCATGCGCACCCCTGACGAT  
GAGGCGATTACCACCGGTGGTGTGCTTGC GGATCTTGCTGCTCGTGGCGCCGATGTCACG  
GTAATTACCTGCACGTTGGGCGAGCAGGGTGAGGTTATCGGTGAGACATTGCGCGAGCTA  
GTCAACGGTGATGCGGATCAGCTTGGCGGGTTTAGGATCCATGAGCTTTACGCCCTCGCTG  
GAGATTCTGGGCGTGCGTGGCATTTCATCTGGGTGGCGCTGGCTGCTGGAGGGATTCCGGT  
ATGGTTGGTGATCCTGCAAATGAGCATCCGCGTGCGTTTATTCACTCTGGTGACCGTGCA  
GTGGAGCAATTGAAAGAACTTCTTGCG

>RXA00853-upstream

TTGGATCCAGTTGAGAAATTTAGCCCCCATCCCCCACATGAACGCTGTTCAAAACATCC  
AGCTTGCTTGTTGAACACTGTTTCAAGGTGTATGATTTTTTTC

>RXA00853

ATGCCATACATCCTCTTCTCCTGCAACTGTGACTCCGCTAAAGAAGCAGTCTTCACGTAAA  
CAGCTCCAAGACATCGCGCTTATTGCAGTTTTTGCAGCACTGATCATTGTGCTTGCTTTT  
GTTTCCATCCCAGTTGGCACAGCGGGAGTGCCATTGTTTTGCAGAATGCCTCCATCGTT  
TTGGCTGGCCTGATTCTTGGTGGTTCGACGTGGTTTTCTCACTGCTTTGCTGTTTCTGGCA  
CTCGGCCCTGATTGGCCTGCCTGTCTTGCAGGTGGTTCGTACCACTTTGGCCGCACTTGCT  
GGCCCAACAGCTGGCTACATCGTGGGTACCTCATTTCCCCACTTGTTGCAGGCATCATC  
GCTTACCTCGCACCTAAAAAGCGTGCGCTGGAATGTTTCATCGTTTTAGGCCTGGCGGGT  
CTCGCGGGTCTGATCACCAATACGCTTGCGGCATCGTGGGTCTCGTCTTTCGTGCGGGT  
CTAAGCTTGAGTGAAGCAACAATTGCTCAAGGTGCCTTTGTGCTGCCAGATTTGGCCAAG  
ATCACCGTCATGGTCATAATCGCCGCTGGAGTTCATGCAGCATTCCTGACATCCGTAAG  
AAA

>RXA00853-downstream

TAGTTCCAACCCACTTTTCCTCA

>RXA00854-upstream

TTATCCGCCCTGGAAGACGGTCATGACGGGGACCCTTCTTAGGGTCGCTGTCGGAGATT  
GGACACGTAACCTCTGTGCTTGCGCTGTATTATCGTCCCC

>RXA00854

ATGCGTTTATCGGAGTTTCGGCAACTCATTTGAAGATGAATTCGGAGAAGCCAAAGGGGAG  
TGGATTGCACACTCGCATGTGATTGGTGGCCCTCGGCGTCACTGCAGATGTTGCAGTAGAT  
ACCGGGGTTGATCTGCGCGATGTATGGGAACAACGTGCATTGATTTCAAGTGTCCCGAA  
GAGCGACGACTTGGTAAAGATGAACCAGGGTTC

>RXA00854-downstream

TAGCTTGTTTCGAGGGGGTTCGCA

>RXA00855-upstream

TAAAAACCTCTCGACGGACGAAGCGCCACAAAAGCAAGAGAAGAATATAAGTGAACCAAA  
TTCCGTTTAGTGACGTCTAGACGCCTAAACTTACCTGTT

>RXA00855

ATGACTTATTTTGCCGTGCTTTACACATACAACCCAGACAGCGAGAAAGTCGCTGAAGTT  
CGTACCGTCCACCGCGAGTTCATTGCCAACCTTCATGCGGAGGGCAAAATCGTTGGCTCC  
GGTCCCTTTCGTGGACGGCGACGGTGGCGCGCTGATTGTCATCAAGTTGGAAGAAGGCTCC  
AACCTTGTTGATGCTGAAACCTGATGAACAATGATCCATTCCACGTAGAAAACGTGCTG  
GACAACCGCGTCATCCGTAGCTGGAACCTGTGACCAAAGATTTTC

>RXA00855-downstream

TAGGCAACTTTTTCTTTAACAAT

>RXA00861

ATGGCTCCTCACAAAGGTCATGCTGATTACCACTGGTACTCAGGGTGAGCCTATGGCTGCG  
CTGTCTCGCATGGCGCGTCGTGAGCACCGACAGATCACTGTCCGTGATGGAGACTTGATT  
ATCCTTTCTTCTCCTCCCTGGTTCCAGGTAACGAAGAAGCAGTGTTCGGTGTCATCAACATG  
CTGGCTCAGATCGGTGCAACTGTTGTTACCGGTGCGGACGCCAAGGTGCACACCTCGGGC  
CACGGCTACTCCGGAGAGCTGTTGTTCTTGTACAACGCCGCTCGTCCGAAGAACGCTATG  
CCTGTCCACGGCGAGTGGCGCCACCTGCGCGCCAACAAGGAACCTGGCTATCTCCACTGGT  
GTTAACCGCGACAACGTTGTGCTTGACAAAAACGGTGTGTGGTTGATATGGTCAACGGT  
CGCGCA

>RXA00862-upstream

AGGTAGTTTCCTTGGCGCTTGTGGTTTCCGCCCTCTTTACTTTTAAGTGCTTGTGATGGAAG  
CGGCTCAACGCCTACAACCTCTGCTAGTCCTGCTCCAGTT

>RXA00862

GTGACAGAACTGAAACCGCTAACCCGGTCACCACAACTCGCACGCCTTCAGATGCTGCC  
CCGTCGCCCTACCACTTCAGAGCCCACTGGTTCAGAGTCCACCAACTCCCCCTTCCCCCACT  
GCTTTGCCCGCGTTGGGTTCCCCGTCGATGGATCAGAAGCAGCAGGCTCAAGTTGGTGAC  
TCCGATATGTCGATCGCTGGCATCCGCGTTGCCGAGCACGAAACGTTACACACGAGTTGTT  
TTTGATATCGCCGGTAATGGCCAACCTGGTTGGTGGGTCGATTGGGGCCACTGATCCAATT  
CAGCAGGCGTCAGGTCTTCCAGTTGAGATGGCTGGTGATTCTTCTCAACGTCAATATT  
CAAGGCACCTGGATATCCTGATCAGGTTGTGCTTCCAGGTATCGATACCGGATCATATCCT  
GGTGCAGGCATTGTTGAAGACATCAACTTCACCAGTATTTTTGAAGCCCGTTCCCAAGTT  
CTCATTTGGTGTATCTGGTCAACCCCCGAAATTAATCTCGGTCTCATTTGCTGCAGGAACCAACC  
AGGCTTGTGGTGGACATCGTTTAC

>RXA00862-downstream

TAGCGCTGGAACGCCG

>RXA00869

CTGTTTATCGTGGCTGCCGACCACCCAGCGCGCGGCGCACTTGCTGTTGGCGACAATGAA  
CCCGCCATGGCTAACCGCTATGAACTGCTCGAACGCATGGCTATCGCACTGTCTCGCCCCG  
GGTGTGGATGGTGTGCTGGGAACTCCAGACATCATTGATGATCTGGCGGCGCTCGGACTG  
CTCGATGACAAGATCGTGGTTGGCTCCATGAACCGTGGTGGCTGCGTGGCGCTTCTCTTT  
GAAATGGATGATCGCTACACCGGCTACAACGTGTCTTCCATGGTTGATCGTGGCGTGAT  
TTCGCGAAAACCTAGTGCGCATCAACTTGAGCGACGCCGGAACCGCCCCGACCTTGGA  
GCCACCGCGCATGCAGTCAATGAGGCTGCAGCAGCACAGCTGCCCATCATGCTCGAGCCG  
TTCATGAGTAACCTGGGTAAACGGCAAGGTGGTCAATGATCTTTCCACCGATGCAGTTATC  
CAATCTGTGCCATTGCTGCTGGTCTGGGCAATGATTCTTCTTATACCTGGATGAAGCTT  
CCAGTGGTGGAGGAGATGGAGCGCGTCATGGAATCCACCACCATGCCAACCCTGTTGTTG  
GGCGGCGAAGGCGGCAACGATCCAGATGCCACCTTCGCATCCTGGGAGCATGCACTCACC  
CTGCCGGGTGTGCGTGGCCTGACCGTGGGACGCACTCTGCTGTATCCGCAAGACGGCGAT  
GTCGCCGCGCTGTTGATACCGCAGCGGACTTGTTTACACAGATATTCAACAATTCAT  
TCGACAGACATT

>RXA00869-downstream

TAAGGAATTTACACACATGTCTG

>RXA00874-upstream

AGCTGTTCCCTACCATTGCTGAACGGGAGTGGATTGTCACTTTAGCCCCCTACGGATTCT  
TCTGGTTTGATCTCACCGCCGATGAAAAGGACGATATGGA

>RXA00874

ATGAGCATTGGCCAACACATCATCACCGAGCGTTTCTACGGCGCCAAGTCCCACACCATC  
GACAACGTAGATATTGTGTTGTCCCGCAATGTGGCGGAGAACACTTTGGCTGTAGTGCGC  
ATCAACAATGCGCTGTATCAGTTGTTGGTCAATGATGATGGCAAAGATGTTCTCAACGAC

CACGTAGAAGAGGTCGGTGCGAGTTTCGGAGCATGGACTGGCAGCTCTGCTTTTCCCATT  
GGCCCTTTTACTCCACTCGGCACAGAACAAATCCAATAGCTCTTTTCATCACCGCCGACAAT  
AAAGCGATCGTGAAATACTTCCGCAAATTAGAATCCGGGCAAAACCCCGATGTGGAGCTA  
ATTTCTAAAATTTCTCCTGCCCCAACATCGCGCCCATCCTGGGTTTTTCCTCCGCTGAG  
ATCTCCGGGGCTAACTACACCCCTGGTCATGGCGCAGCAGTACGTTCCAGGTTTGGATGGC  
TGGTCACACGCGCTGACTACTACCTCTGGCAGCTTTGCAGAGGATGCAGAAAAGATCGGC  
GAAGCCACCCGCAATGTTACACTGCTCTTGCATCGGCCTTCCCTACTCGGGTAGTTCCC  
GTAGAAGCACTCGCCGATGCGCTCACTACCCGCCCTTAATGAACATAATCTCCCAAGCACCC  
GAAATCGCCCGCTTCAAAGAAGCAGCCATCGACCTCTACCAATCGTTGGAAGCGAAGCC  
CACATCCAACGCATCCACGGTGACCTCCACTTGGGGCAGCTCATCAAAACCCCCGAACGC  
TACATCCTCATCGATTTTGAAGGCGAACCTGCCCGCCCACTTAATCAACGACGCCTCCCC  
GACTCTCCCCTGAAAGATCTCGCCGGCATCATCAGATCCATCGACTACGCAGCCTACTTC  
GACGGCGAACACACCCAATGGGCCAACGAAGCCACCGCGCTATTCTCGACGGCTACGGA  
TCAATTGAAGACCAAGAAGTCCCTCAATGCCTACATTCTGGACAAGGCGTTGTACGAGGTT  
GCCTATGAAATAAACAACCGCCCCGACTGGGTGAAAATCCCACTCGAGGCGGTGCGAAAGG  
CTTCTAGAC

>RXA00874-downstream  
TAGTTAGTTACTCTGCGTCAAAC

>RXA00876-upstream  
TTGACTATCTCGAATTAGGTGAGGGCTGGGAGCCAGAAATTTTGTGCTCTGATGCTGTTG  
AAATTTTAGAAAATCTCATCAAGGAACTAAGGGGAATTCC

>RXA00876  
ATGACATTGAAAATTGATCCCTCGTCCATCAGTAGTGCTGTGCTCGCTTGAATGAGCTT  
CAGCATCAAGCTATTACTGCATCTCAAGTGGGAATGAAATCAACAATCTATCCGCGTTT  
TCGCCCCGTCTCTGGACTCGATCAATTGGGTTCCGGTCACGGGAATGTGATTAATGGTGGG  
GCAGGCGCAGCAAACTCTGTGCTGAATTCCTATGCCGAACAAATCGAGTGGTTGTCTGCG  
GCTTTGACAGGCTTCTGGTGCGGCTTTGACTGGCCAGGATGAATTATTCGCTAGGGGTATG  
GATGTAGCGGATACCGGTGGCAGGGTTGTAGAAGAGTCAGTAATGTTCCCGCGCGCGCCG  
GCACCTCGGTTTGAAGTCTTTTCGTTTAAATCCACAGCTGTAGTCTTTCGTTGTCTGTTG  
GATGCGTTGTGTAGTCAAGTTTCCGGAACCAACTCGGGGGCGGTTTGGAGGCGCAGGGG  
TCTTGGGGCTCTATGGCGTCGGCTATTAGCAATGTGTGCGGCTTCGTTGTCTGCTGATTGCT  
GGTGAGATTTTGGCGGAGAACTCAGGCGAAACGTTTGAGCAGGCTGCTGCTCGGATTAAT  
GAGGTGEGGGETGEGGGGGEAEGTTTGETGEGAATGEGAAAATGATGGGGGEGTEGGTG  
GGGACGCTGAATCGGATTTATATGGGGCATCGCATGCAGGTGTTTATGGCTGCGACGTCG  
ATTAAGGCGATTTTGGATCCGGTGACAGAGGCTTGCTGCGGAGAGGGCGTTTTTGGCGTCG  
TTTCAGGCTACTTTTCAGGCGGATGTGTTGACGGGTATGCCCTCCTGTGAGCAATTTGATG  
CAGATGAAGGGGGCGAATGGTTCTGCGGGGGAAATTGCTCTGGGGATGGATGAGATTGCT  
GGCAGTGGGCAGGCATGGTCTGCGGCGGGGTTGACTCCGTCGGGGGCTGCGCAGGGTGGT  
GTCGCCAATGCGGGCAGTATCGCGCCGGATGCAGCGGTTCAAGGTGCTGCGGGGCAGAGT  
GGGGTTGGAAGTTTGGCACTGTCACTGATCAGTTGGATGGCATCAATATTTGGGGATATG  
TTGACCTCTGCTGCCCTCAGCTGGGCAGAGCCTTGCGAATGGTTTGGCGATGCCCTACTTCT  
ACGCCTAATTCGGCGTCCGGTGCGATTCTTCTCCTCGATGTCTGCGGCATCGCCGCTTGGT  
GCGTTTGGCAGCGGTGCGAGGTTGGGCGCACAGGGTGGCTCGATTGGATCTTCGGCACCT  
GGAGCGATCAGTAGTCGAGCGGCCGGATCCGCAGGTGGTTCCGGTACCGGGAATGACTGGT  
GGTCTTGGCGCGCCGGGGATTACCTCGGATTGCTTGATGGGAGCTCGAACTCATGGTGCT  
TCTTCCGCGGGAGCTGTGCTCCGATGATGGGTGGTGCTGGCGGAATGTCTGGTGGCGTC  
GTTGGTGCAGGTGGTACTGGTTCTCAGAGCAAGTATGCGCGCCAGACTGGATCGTCGGTT  
GGATCTAGTTTCGACGTCGGGTTCTGGCCTGGGGATGGTGGGATCAGGGAGTGGGAAGCCG  
TCGATAAGCAATTTTGGGCGCGGCATGATGCCGATGATGCCCATGATGCCCATGGGAGGC  
GCCGGCGGTGGGCAGAAGAATACCGGCAAGGTGAAAACGGTGACGCTCTGCGGTGGAGGAA  
GACCGCAATTTGGCGGCGCTGCTGGGTGATCGGGGGCCGTTGTTCCGGGTGTGATTGGT  
GACTGGGTGAGGGGC

>RXA00876-downstream  
TAACGCAACAATGTGTCTAAGCT

>RXA00881-upstream  
ACCTGACCGAGGAAGCCGACGAGCTGACCCCAACGCTGAAGGTCAAGCGCAACGTTGTTG  
TTCGCCGTTACGCAGACGCCATCGACCACATCTACAACCG

>RXA00881  
ATGAGTAACACAGAGACCCAATTTGATTGGGATGGATCGACATGGACCCGCACCGAAGTC  
GGCGAAGCACCAACACGCTTCGCTGTGGGCGTGATGGAGGATTTTCGCTACATTGCAGCC  
ACTGGCACGGACGGGGATGAAGAGTCTTTACTTTGGGCTCAAATCCGGGTCTGACGTTT  
GGTGATCCCGAGTGGCTTTTCGCTCAGGATAATCCGCAGTATGTGGTGGAGTGCATTGGC  
CAGCAGGGAACCGAGCCGGCAGCCCTGAAGGTTGTAGATAAATATTTGTCGCGACTATCT  
GATGAGGAGTCACGTGGCGAACCACGCGGATTCTCAATGAATTGGTCTCGGCGATGGAG  
TTGCCGGCATTGCCGTGG

>RXA00881-downstream  
TGATTTTTCTCGGGCTTTAGTGA

>RXA00882-upstream  
AAATAGCTGAGAAATTGGCTAGAGGACGGCTAGCAAACCGGATCAAGACCGGCTAGAACT  
TTAGCTACGAGGCAAGAAAAGGAAGGTGTGTTGGAACGCG

>RXA00882  
ATGAGCAGTACAACCGCACAGCTACGCCACCGAGAGCTGACCCAGGAGATCTACAACATC  
GGCGACGAGGTGCTGAATACATTGAGCACATCATGGAAGCAGTCTCCGACTGGGATCTG  
GAGCTCGTGGAAGATTGCCCTCGCTGAATTCGATGAGATCATCACTGAAGCCCGCGATGAC  
TCCCGCACTGTTGTGGCTGAACTTTCAGGCCTGCGTCACGCACTAACCCTGGTATCCGT  
CAGGGCACCGTGAGCGCTAGAGCCACGGTGGAGGTGGACGTGCGATAAGCCGGAACGCCGT  
ACCGCCTCCGAGCTGGAGCGCGACTTCGATATTGATGCCGGCCTCGTTGATGTACGCGAT  
CTGTGACCGCGCTCAATGCGCGCACAGACGCTGTGGTTAAGCGCCTGGAGGCCACTGTG  
GAGTGGGTGCTGGCGGAACTGACAAGGTGGCCAACGATCTGGATTCCCTGTCTCTGCCA  
CTGCTTTATGGCCGCGTTGACGCGGTGATCGAAAGCGCCACCAGCGCATGGATCAACGCA  
GTGGGCACCGCCAATCCGGCGTATGTGCGCACCATGCGAGGCAGCAACCCGCCACGTTTC  
CTGCTTGAGCGTGCGGTATCGACGCTGTCGTGGCCCGGGTTGCAGACAAGCTTGCGCAA  
AAGCGCAACGCTGTTTCC

>RXA00882-downstream  
TAGAAATCTCGGTGCAGCAAAAA

>RXA00883-upstream  
AATATACACACCAAAAACTGACATGCCCCAAGCCTAGTGCCTGCCCCCTATACATGATTA  
ATTGATGTTAAACATAGCGAATTCCTAAGAACAGGGTAGA

>RXA00883  
GTGCAGGGTATGAAACGGAAGATGGTCGCAGCGGCGCTGGCAACAGCGCTTCTTTTTGGG  
GCTGCACCTGCGCACGCTTCCGAATTGGTAGAGCCCACCACAGTTGCAGAGTCAGTGGCA  
CTCGATCCCAACAAAGCAATCAATATTCTACCCAGATCTCTGGGAAGACATTGAGGCA  
AAACCAGGCGATATCGTCCACATCCCCCTACCAGGGCACCCGAAACTACGAGGACCTCACC  
GTAGAAGTCGCGAAACCTTTTCGAAGATTTCCAAATCCTCGTCGGACTCGACAACAGCATC  
GTCATCGCAGTGCCAAAGAACTTAAGTGGCGCAGCATCAGTCGCCCCAGTTTTCACTGTC  
TCTGACAAAAACGGTGAGATCGACTCTTTACCATCAAAGTAAGCGTCGAGCCACGCCGC  
CAAAGCGACGAAGAAAAGCGTCCGCACTATTTGATGTCATCTCTGAGCTTGCCTACCGC  
ATGCCTCATCTGCCATTTCGTGTCAGAGTTGCTGAAGTAC

>RXA00883-downstream  
TAGAACAGTAACGAGAAAACCCC

>RXA00887-upstream  
AAGAAATCCGCAACCATCGCAGCGACAACGCTTCCGTGCATCGCGAAGGCGGAGAAGAAT  
CCGGTTTCTTTGACAAGCTCCGAAACAAGTTCCGCAAATA

>RXA00887

ATGTCACTGCCAGTATTTATCTCTGATTCCGCGAGCCGGACCAGGCGAAACCATTTGAGCTC  
GCCGGTCCGGAAGGCCGGCACGCCGTCACCGTCAAACGGATCCAGGTAGGCGAAAAGATT  
TCGCTTATCGACGGCCGGGTACAGCGCGCACCTGCACGGTCACCGCCTTGCAGGGCAA  
GACCGCTGAACGCTGTGGTGGATTGGTTCGAGGAAATCCCCGCACCGAACCCACAGGTC  
ACCATCGTGCAGGCTATCCCCAAATCAGAGCGTTCCGAGCTGACCATCGACCTGCTCACC  
CAAGCTGGCGCCGATCGGATTGTTGCGTGGCAAGCATCGCGCTGCGTAGCAAAATGGGGC  
GGCAAGGAAGCAAAATCACTGGCTAAATGGCAGGTGGCTGCGGAAGCAGCCGCCAAGCAA  
TCGCGGCGCGCAACGATCCCTGAAATTCTTGGCGTAGTGGGGGAGGAGGGCGTCGAAAAG  
CTTATCGACGAATCCGACCTGGCCATCATCTGCACGAAGAAGCAACCGCCGCGATCCGT  
GAACCTGGAATTTTCCGGCAAACGTCGTGGTGTATCATCGGACCCGAAGGTGGCGTCGCGCCA  
TCGGAAATTTACGCTTCGTGCGACGCTGGCGCACACACCGTGAAACTAGGCCCTGAGGTG  
TTGCGCACTGCCTCCGCGAGGCATGGTGGCGCTCGCAGCTATCGGCGTGCTGTCTGACCGC  
TGG

>RXA00887-downstream

TAACATTTCTCTGACATAACCTT

>RXA00889-upstream

TGGTCCGCCACCAACTGGTTGGACACATTGTGGATGCATACGAAGACTATGAAGAACGCG  
AGGCCCGCGAATTGAAACGCAAACGCCAGGAGACACGGCC

>RXA00889

ATGAGCATTGAGGTATTCAACGAATCAGGATACGACGGCGTCAATGAAGAAATGCTCATT  
GATGTCTCTCTTTCGCACTCGGGGAAATGGACATCCACCCCGACGCCGAAGCATCCATC  
CACATCGTCGACGTCGACACCATCGCCGATCTCCACGTGAAATGGCTTGATCTTGAAGGC  
CCAACCGACGATGAGACCTTCCCGATGGATGAGCTCACCCCGGCTACTCCCGCCCCGAC  
GGCGCCACCCCGGCCCCCGCATGCTGGGCGACATTGTGCTGTGCCCAGAGTTCGCGGCA  
AAGCAAGCGACCAAAGCAGGCCACGACTTAGCCACGAGCTAGCTTTGCTGACCGTGAC  
GGCAGCCTGCACCTGCTTGGCTACGACCACGTCGATCCAGCCGAAGAGCGTGAAATGTTT  
GCCCTTCAAACGAGCTGCTTGGCGATTGGTACGACAACGTCGAAGCCCGTGGCGTCACC  
TACCAGCCAAAACCATCCGGCGCCGGTGCATTCCCCACCGCTGCTGATCGTCTGGAATTG  
GACGAAAAGATGGAAGCGGATGACTCTGGCTTTGGAGGCGTTGAGTCC

>RXA00889-downstream

TAGGTGGAATCCTCAGTTATATG

>RXA00893-upstream

ACGCCAACGCAGAGTGTTTAAAGAACTGGCAGTTGGAAAGCTGCAGTTGATTTAGCCTG  
CGACGAACTCAACGACCTCAAAGCACTGGACTAAATAGCT

>RXA00893

ATGGTGGAAATCCCAACACATCATTTTCATCCCGGAATCCCAACAAACACCCGACGAGTTT  
ACCGAGGTAGTCAACGAGATTCCCGCCGGAATCAAACCACGGATCGTACCGTGGAGCGGT  
AGTGTTCGCGAGGTGTGCGAGGCTGTGGAATCCATCCTCGACCGTGAAGAAATCCGGCGC  
GTCATCCTGGTCGGCGCTGGAACCGGAGCTGGAGTGGCGTTGGAAATTGCCAAGAACCAA  
CCCCGCCGCGTGGAACGCCCTCGTGCTGGATTACCGTTGGTGACCTTTGATGAGAAACAA  
CTCAAAGGCATGAGCACCGCACTGAAAATGATGCCAGGATTCTTCTTCCGAAAGAAGAAC  
AAGAAAGACCTCCTGACGAGGTAGAAGAAGCCCGTACTGCAGTTCCGATGGGATTTTCC  
GAGATTACCATGCCGACGTTAATCATCCGAGGCTCCGCTGCGAAGGCTGGAATTGATTCT  
GACTTGGAACAAATCCCGAGCGCTCGGGCTACCACCATTTGGTGGCAATTGGCTG  
ACTTACACAACGCATGGACGCCAACTGGTGCTGCGATTGCGGAATTCCTCGCCCAA

>RXA00893-downstream

TAGAAGGGCACGCCATAACGCCA

>RXA00895-upstream

GTCGCGCCGGAAAGATAGACTAAGCCACATGACTTCGGACATGCAGAAATCTCCACAGCA  
CTCGGCCACGCCTTCAGAAGAAAAACAAGGCGGACTGCC

>RXA00895

ATGCGCGGTTTGGCCATGATTTTGATCGCCGTGGCCGTATTGCTCGCAGCGTGGGCACTG  
TGGTCAATGCAGGGCAAAGACGACACCTCCACCACCAGCGCCGGACAAACCCAGTCCACG  
GAAACCAACGCGGGAACCTATTGCTGAATCTTCTGGCTCTTCGGATTCCGAGCAGGCATCA  
GCAGAACCTGGAACCTCCGAAGAAACCTCTGCTGAGCAGCCAGCTGCAGATGGCGAAGCC  
GCTAATGCTGCTGGGGCCGCTGCTGCTGGTGGCGCTAGTTCGGCTAACGGCAACTCCACC  
CCAGTGAACACTCTGTACGTGCTCAACAACCTCCACCGTCCCACAACCTTGCAGCACGAGTG  
GCAGACAGCCTAAGCGGTGACTACCAAAAGGTAGAGTCCGGAAACCTTCCAGACACCATC  
ATTCGCGAGAACACTGTGTACTTCACCGCTGGAAACACCGAAGCTGAAAAGGCTGCACGT  
GAACTCGCTGACCGCGTCAGTGGCGTAGCAATGGAACGCAGCGATGCACGTGCCAACCGAA  
ACAGAAGGCAAAGATGCCCTCGTTTGGTGTGGTCCAAGACGTAGCGCTG

>RXA00895-downstream

TAGTTTTCTCGGATTTGTTGGAA

>RXA00904-upstream

AAGCAGTGCAGTACCAGGCTGGAAGTGTGGACAACA

>RXA00904

ATGATTAATACCATCCGCTCCGAATGGACCAAACCTTGTCAACACCAAATCCTTCTGGTGG  
ACAACCGCACTAATTCTGGTCTTCAGCCTGGGATACGCAGCGCTCACCGGATCACTCGCC  
ACCGGCGAAAGCTTTGCATCACTGTTCCTTCTCGCAGGCAGCACAGTCACCGGCCTTTAC  
CTCCTTGGCTTCGTGGTGATCATGATCCAATCCATCATGATGTTCAACACCGAATTCGA  
TTCGGCTACCAAACCAAACCTTCCTCGCCACACCAAACGCTGGGTGTCGCCGTTTCC  
AAATGGTTGCTGTACCTCGTGTTCGCCGTAGTGTGACCTTCATCACCGTGATTCTGTGC  
TTCTATCTAGCCAAAGCCCTGGCATCAGACACTGCAAGCTCCACCCTGGTGGTGTGGGAA  
GATACGCAAGCAGCAGCAATCATGTGGCAATACCCACTGGCAGCAGCACTATTGGTAAC  
TTCTGTTCCGGAATTGCGCTCCTGTGCGTCAAACCTGCAGGAGCAGTGGCACTGGTGCTT  
ATGTGGCACTTCGCTATCGAAAACCTCCTGTCTTTCTTGCCACGCATCGGCGAATACGTC  
GGCAAGTATGGTCCCTTCACCAACCTCTACGCATTTCATCACCGACTATCAATCAATTGAT  
CCAGGATGGTCCACCACCATGGGAGCGGTGTACTTCGGAGCGTGGGCATTCTGTGTGTT  
GCACTCGGAATCGTCTCCTAGAAAAGAAAGACGCC

>RXA00904-downstream

TAAAATGCCCTCTAAAATATCGC

>RXA00908-upstream

TCGGTCTCCACCTAACAGGATCCTTCACACCCTTCTTTTCAATATCTAGAAAAGACCGA  
TCCGCCAACATCTTTTTCATGACGCAAAGGACCGTGTC

>RXA00908

ATGTCTCTCTACACCCGTACTCAAAATACCCGTCACTCCACCATCATCGAGTTCCGCCGC  
GAGCAGACTCGTAATCACACGATGGAGCCAATCCAGTCCGAGCCACGGATCTACGCTGAC  
GATCCTTTCCGTGCACGCTTCGGACACCAACTCCCCCGGACTTCGCGAAGAAGCACGC  
GGCATGGAATGGCGCACCTTCACCAACACCTACGCACCAACCGGCAACCTGCGCATCAGC  
AACCTCGAGTCCGAGGCACGCCGCGGAGGAATGTTCCACTTCAACGCAACCCCTGATCAAC  
AACTGCCAGGGCGAGCGCACCAACACCGACGCTCACATCATGGCAACCGGCCAGTTTCC  
GCATGCACCAACTTGCTTGCCGACGCCGCGCTGCGGTTGAAATCCTCGAATTCACCAA  
TTCGACATCTTTGAAGCAACCGTCACCTTCATCTACACCTGCAACAACGTTTCCCGCACC  
TGGGCAATGGGCTTCGGCGGTACCCCTGAGCAGTCCGCTGCTTCGCAATGAGCTCCGCA  
GCTCACTTGCTCTACGGA

>RXA00908-downstream

TAGGTTGCAATAACATTCATTCC

>RXA00915-upstream

CTTGGCTGCAGGTCCACCATCAGCACAGGTCTTTGACATGAACGTAGCTCGCCGCGACGT  
TTCTTCAGGACCTTCTCTACCTGGTGAGGGTGAGTTCTAA

>RXA00915

ATGTCCGCCGCCTATTTCGACAGGACACCATTTTGACGGTGTTTCTGGGGAGGGGTCTGACC  
GCTGAAGGGATCCGACAGACCCTAGAAGACTTCGCAGAAACCGGCCTAGTCCGCAACCTG  
GTGTGGATTGATGCCGATAGTTTCCACGAGTCTTCATCTGAAGTCAACCACTTGGCAACC  
AACCAAGACGGTCTTCCGGAGCTTCAGCGACGACCTTCAATGAGTTGGTGTCCCGGTCA  
CGAACCACCAAGCTTCACATCGGTGTCATCAACGTCATTGATGGCAGCGAAGGCATGCTT  
CATGCAGAAGAACTCAACCCATTGGTTGGGATCATCGACAGTGTCTGTTTACACCACCAA  
ATTACCGGATCCAACGTGATGATCGGTGCGGTGGCTGCCACACTTGATGAGGAACCTCCA  
ATTCTTCGTGGTTATGTGAACCTGATGCTGGCACCTGAAGATAGCCACAGCCCAGGCACC  
GCAACAGTGACCTACCGTCATGGTTTCAGC

>RXA00916-upstream

AGCGGATCCAACGACACAAATGGTGAGTTTGGTTCCAGCGGCGGCTTCGGCGCGGATAA  
CCTGTAACTTGCATTAAAACTAACTTAAGGATTTACAC

>RXA00916

ATGAAGAAAGTTCTCGTTGTCGGCTGTGGTGGTTCAGGTGCCAAAACGCTCGCTTATATG  
ATGGACCAGCTCAAGACCACCCTGGCGGATAGTCTTCCCGAGCGTTACCCAAATCCAAAG  
GAAGCAAAACTTCCTGGTGCCTGGCAGTTCGTGTCGGTGGATGTTCCGACCTCCCCAGAA  
AGCCCCGGCCCCGAACCTTCCGAATGTTCCAGAAGCCGGTGGACGTTATATTTCTGTGGT  
TCCTCGGATCGCTATGCCACCGTTGATACTGCGGTGTCCAACCAGCTCTCCTCCAGGGGC  
GCGTTGGGTGGCGTTTCTTCATGGGCGCTTCGAAACCCTGATTCTGAAACCACCCCAATT  
AGTAAAGGTGCGGGCCAGTACCGCTCCATTGGCCGTATGTTGATCCTGAGCCGACTTCAG  
GAAATTACAGGCTGAATTACGTAAATCATGGGATGTGTTGTTTTCAGCGGTGAGACTGAACGT  
GAGCTCGCTGACCTTCGTTCTGCACTGTATGGCACGTCTGTTTCCAGTGGTGAAACCTCT  
AAAGAGCAGCCAATTATCTTCGGTGTCTCCTCCATGGCTGGTGGCGCCGGTGCTTCGATG  
GCTCTAGATATCTGCCGCTGCTCACCGGTCTTGAAGGCAACGCAGTGGGTCTGAGCTCA  
CTGTTTATGGTGACCCCGGATATCTTCTCCAGCTTTCCCCAGACCAGGTGCGCGAACT  
AACCCAAACGCGCTGGCCATGTTTGCCGAGCTCGCAGCAGCACAGATGGGTGACGCTTCC  
GAAGAAGATGCCCGACTGTTTAACGCTTTGGGTGTTTCTGTTGGCGATGACTCCATCCCA  
GTTGGACGTATCTTCCAGTGGGTATTCCGCTCCGGTGAAACCGCGCTCTGCTTGGTGT  
GGCAAGCCAGATACCGTCTACCGCGCACTCGGCCGTGGCCTTGCAGCTCTGATGGCTGAT  
GAAGTGTCCATGGACAACCTTCGAGCAATTACCCCTCGGCAACCGTGGTGGCGGAAGTGCC  
GATCAGAGCAAGTACGCATGGGGTGCACAGGAAGCTAAGAACATTCCGTGGGGCAGCTAC  
GGCTACTCACAACATCCATGGGTGCTGATCGCTACGCAGAATACGCCGCCAGCGACTG  
GCACGCTCTGCCGTGGATCGTCTGCTCAAGGGACACTTTGATCCAAGCAATGATGCGGCC  
TCTGACCAGCAGCTTCAAAAGCGACTCGAGAACAACCGTCCATCGCTGATGGGCAACCTC  
AGCGACGTTTTGCCCCGTCAACGCGCCGGCAGGGGACTGGATTTTCCATAGTTTCAACCAG  
ATGATTGAAAACCTGGACCCAGCGTATGAAAGCAATCATCAAGAGCCAAATTCCTGCAGCT  
AATGGCCAGCGCGGAAGTGAATGGCTCGGGGATGTCCAGCGTGCTTTCCAATCATCCAGC  
CAGATGATTGATAATGACTCCCGCCATGAGCTCTACATGGGTGTGCGCCGACTGGGCCAGT  
GCTGATGTGTTGCAGCGCCGAGTAGTCGAGTTGCTTCGTGATGAGATCGCAAACTGGGC  
GTTCTTTACGGCGTCAGCGTGATCGAATCTCTCAGCGCCACAATCCAAAACCAACTCATC  
GGACAGCTTTCTGATCTGGCAAACAACCGTGCACCTGAGGCTGTTCAACTAGACGATGTC  
AGCCGAGTGAACCTGGACAACAGCAAGGGCAGGATCGACGATTCTGACAGCTACATCCAG  
GAAATCGTGTACGATCCACTGGTCAACTACACACCCGCGCAGTGCAATACATTGCGGAC  
CACATGGCTTCGGTCTTGACGATTTCCTCAAAAATTTTCATCTACCCACTTCAGCGCACC  
ATCCAACGTGAGACCACTCCCTAGAAAAGGACTACCAGCTCACCACGATGTGAACCTG  
GGAATCTCCAGCTGAAACCAACGTTCCAGCAGTGTGGCCAGATGAATCTCAAACCTACC  
GTCCCGTACGTTTTCAGTCAGGCAGCCAACGAAGTCTTCTGACCGATGTGCGCTCCTTC  
CCGAGCAGTTCCAAGCACACGTCCGCTCGTCCACCGATGACATCAACGAACAAAACGAT  
TACTCGAGCGCCCTGCAAGAGGCTCAACTCGAGTAGTCAGCGGTGTGTGGGAATCCAAG  
TCCGGCTCTGAAAAAGCACACGCGATCTCATCCGCTCATCGACGATGAGGTTGCCCCG  
GACCTGACAGGGATCCGTCCGGTTCCGGGAAGCCTCCGCGACCTAAGCAAGCACGCTTT  
GAGCTGAAGATTGATACCGGCGAAGTACTCGAGCGCTCCCGCCAGTACATCCGCCGCCCT  
GGTTTCTCTTCCAGCAGTTTCATCGCCAGCTCACTGCGTGAATTCATCACCGCGCCGGGC

TTGGCAGACCACGAGCGTCGCGCGCGCCGTCAGCAGGTGCTGAGCAAGTTCAGTGAGGCA  
ATGACCTACGCGCTTCCATTGGCTCAGATCAACCCTCAACTGGTTTCGTGCGCTTTACGGC  
GATGAAGTCCGCTACAACCTTCAACTTCTCTCGCATCCCATTGTCGGCGGATGAGCTTGGA  
TCCAGCCTGGAACAGGCAGTTCGTGATTACCCGAACCACCGACCAGCAGATATTTCCAAG  
CCACTGGGCAAGGCTTTGGTCTCCCAAGGTGAAGAGCGTTCCATTGATATCTTCGGCTCT  
TACCCCAACTACGCGCCGATCGTGTGTTGACTCCCTGCTGCCTCCAATCGAGAAGCAGTGG  
CGTCAGATCACCGGCGATCGCACGGAATTCTGGCATGGCCGCGTACTCGTCCTTTGACT  
GCTGCACTTCCAATGACAGACCTAGAGCGCAACGCCATGGTCAAGGGTTGGTACATCGGT  
CGTCTGGTCCGACGAGTATTCTTCCCCGCAACTCTAGACACTGCGGATACCACTCCAGTG  
CAGATCTACGATGAGAAGTCTGATTCTGTTGGATCAACTTCTCCACCCCAATGCTCACCCCA  
GTGTCCCGTTTCCGTGGAAGCCTCGATTGGCTGCCAAACCTTCTGGAATCAGCATCATTG  
GCATGGGCACGGGCGAGCGTCTGTCTTTGAATCCGTCGAGCCTTACATCCAGCTC  
CGCCAACTGTGGGATGATGCTGCGAGCCCATCCTTGCCAGGACGCACCACCCGCGGTGAG  
AAGCTGCTGCACGATTGGCTTTTCGACGGCAACCGCATGGCTGGAACGCTCTCCAGATC  
CCAGGAACCGAAGCTGGTGTACCCCAAGCTGCACGTTTTGAGGCTGCGAAGAAGTCTCTG  
CAGCGCCAGAACGAGATCTCGCAAAATTACGTCCCAAGCGACAAGCTTCGCCAAGGCCGT  
CTGTTACCACCGCTGATCGTCCATTGCGGACGTCAAGGATCGTGAAGTAGCAGCACAG  
ATTCCAGTGTGTTGCTGACCTTGCAGCCGATGTTTTTGTATGGCACCCCAAGAAATCATCGAC  
ATCCTGGAAGAGTGTGCTGCGAGGTCCACCATCAGCACAGGTCTTTGACATGAACGTA  
GCTCGCCGCGACGTTTCTTCAGGACCTTCTCTACCTGGTGAGGGTGAGTTC

>RXA00916-downstream  
TAAATGTCCGCCGCTATTTCGCA

>RXA00917  
CAGCTGAATATGCAGCTGGTGGGCGGTGATGGTCAGCCACGCATCCTTGAGGGGTCCGCG  
CTGGTTCGATCTTGGTTTACCCGCGCAGATACCGGCGAGTTCGCCCCCTTTGGCTCAAGGA  
ATTGATATTTCTGGCGGCGAATTAAGCTTCCCGCTGGATACGATTTTCGCAGCTCCCAGCC  
ATCGGCACGGTGGAAGCGCGTACCACGATCACCACCGCAGGCGTCGATGATCTCCCCGGC  
ACCAGTTGAGCCCAATTCTCAACACACGCGCATCACCATCACTCAGCGCGATATGCGCT  
CAGCTGCCAGCTCGGTTCCGTTTACAGCGGATGAGGACGTTGTTACCGTAGACATCCCC  
ATCACCGGCCCCCGCAAGGTATGGATTGCACCGGGAACCCAGCTCAGCGGAGTGCTTTCCA  
GACGGCGTGACGGCATTGCAGCATCAAGTACTTTTCGACAGCCCAGATAATGCTTTGGTG  
CTCGGACTGGATGAGCAGGGCACGATTCCGTGTTGAACCTAACCGTGAGCGATCTTCGTGAC  
GGACTGGTCAACGGCTCGATTCCACTCCAGATCTCCAACGCTGAGGGCGCCAATGAAACC  
AGCGTGGATCTGCCGACAGAAGGCACGTTGAGCGTTCCCATTAACGCCCTCCACTTTTCGCA  
TTGGCATTCAATTTGGCCCTTGTGCTTTCCCTCCTGATTCCGCTGCTCATTTTGTATATT  
GTGCGTTTCCCTCTCCGCAAGGTTCCGTCTCTGCGATGAGTGGCGTGCGCATTCAGTG  
GAATTCTCCGGTGAAGCTTCCGCTATGCGGGCAGCACTATGCCTGATCTCGCATCGCAA  
ACCACCGCCACCAAGCAGGTGCTGTTTTCATGGAGACACCTTCAATGTGGAAGGCCACAAA  
CTTAAAGTCCAGCGCTTCCAGCTGAACCCGATTGCGTCTCCTGCAGTGATCGTGCAGACC  
GACCCGTCGATCAGCTTTCGACGGCAAAACAAAGGGCACACAAGCTAAACTCCCGCTGGCG  
GTCCAAGGCAGTTGGTTCTTCACTGCAAGCGGCGCTGACCTTCCAAGATGGAAGTCAATC  
GCCCTGACAAACCTGCCGCTCGAGCAGGGCCAAATCGACCGCATGATCGCAGGTATCACC  
AGCAAAGCCCCGTGATAGGGCACGCGAACTACAAAAATTGCTTGACGACGCCGCGACCTCC  
CAGCCCGCAAAGGTTCCACCGCGCGCCCCAGCCGCGCAGGGCCACGTCGAAAAGCAAGCT  
CCTAGTTTGGCACTGGTTCCGGTGGTGGTTTCGGCTCCAGCAATGGTGGAGGCTTTGGC  
TCCGGTAGCGGATCCAACGACACAAATGGTGGATTGTTGTTCCAGCGCGGCTTCGGCGCG  
CGA

>RXA00917-downstream  
TAACCTGTAACCTGCGATTAAAA

>RXA00921-upstream  
TCTGGGAACGTGGATTGGTGGGAAGCAGGTGAGTTGCCCCGTGGCCTTGAGATGGACTCATG  
TCACCTACGCGTCCTTTAGAGGAAGTGCAGGTAGGGGTGG

>RXA00921  
GTGGAAGGTGGAACCTTGGTCTGCTCAGGCCACTAAAGAAGACCTCCAATTTATCGCGGAG  
GTTGCGCCCACTCATATTGAAACGGTGACCCCTTTTGATGATTTTCATCTCATCAGAAGAT



ATCGATGCGTTGCCGAGGAGGTTTGAGTACCGTCCTTTGGCAGGCCGATCGTTGATCATG  
CAGTCTGTTCCCTGCAGGTAAAGATGCCACTGGACGTCCAGGGAATGTGTTCACCCATGCA  
GTATTTGATGGGGATCTAGAAAGCCCACTGGAGTCTGTTTATCCCATTTCCCTGTACCGT  
TCACCTGATTTGCTGACCCCTTTTCGTGCAGCCGCGGTCAACGCTGCCGAGCTCCCTTTG  
GATGCAGGCGAGCCGAGAATTGGCCCCATCACTGATCTGTCTTGTCTGCGTGGATGATGATC  
GACAGCATGTTTGGCGATCGCAGACAGCAGTTCCTACCAGCTTCAAGATGCTCTCCAAGCT  
GGAGATAAAGCTACTGTTTGGTTCTGAACAGCACTAACGAGGCAGCATATTGGCTTCAA  
GCGTTGTCTTCTACATTGACTCCGAATGAAGCCCGGCGTCTGTTGCACTTCTCAACCTTT  
GAGCGTGCTGCTACCTTGCCAGCTCCAGATAAATCAATGGAGGCTCGTTCTCTGTTTGTG  
GTCCCAGGAATTGATCGTGAATTGTTGGCGGAGCATTACAGGGATTGTGATTATCGATCCG  
GAGATTCCACAGAGCCAACCTTTTCGGCCCGCAGGGATCCTGGTCCCGAATGACAGAAGGG  
CTCTTCTCCGACGGTTTTTGATGCTGATGAACCTTGTCGCAGGGCTGATTGCTGCCAACGAG  
AACCTGGATAATAGCCAAAAGGAACTCGCTCAATTTGGAGACGGTTTAGCGCGATTTATC  
CGGAATGGCCGTTTTTTCGGGCACGCACCCGCTTCGCGTACTTGCTGATCAGCATATGTTT  
GGAAAGGTGCCAGACAAGCCAGCACCTAAGGTGGAGCCTGTCGCTCCGGCACCACCAACCCC  
AATGCAATTTGGGCGCGTGATCTGAGGTAGTTTACAATCCTCGGAGAGCATCAGAATCA  
CAAGATTGGCCAAGTCTGAGGCGATTGCCGGATAGTCGGCGCAGGATCATCAATATGTCA  
GAGCAGGCGATCAACAGCATTGAGAAGCTTCATGATTGCGCGGCACAGGATCTTGTGGCC  
TATTTGGATTTCCTTTTGAAAACCTGAGCTTGCGACAAGCATTAAATGCTTCGGATCCCTTT  
TTTCGGAGTAGTTTTTCAGACTTTCCAGCGATGGACAACCTGGCGACACATTAAGTTTACC  
GAGGATGCGCACCCCTCGCTTGAGGGAACCTACTCGTGGACGCGAGAACGCGATGCTAGGAAC  
AGAGCACCTGCGGCAATCGTCTTGGAACCATATCGTTCCGAACCTTCAGCAGAGATCGGTCT  
TTGCCAGACATCGAAGACTGGACGAGAAGCGATGAAGCTCAGCAGATCTTTGCAGGAATC  
ATTGCGGGTGCGTCTGTTCAAACCTGGTAGAAGCCACTTCATGTGGGATCTTTTGCGGGCG  
TATTTTGGAGTCGCTTTGATCGGCGACGAAGATACCTACAGGGCTTTTACTACTCTCACG  
GTGATTTCTGTTCTTAGTTTCGTGCAGTTAACTCTTCAAGAGGGCAGAACGGAAGACATT  
AGACGATTTCGAGAAATATGGTGAGCAGATTGCCCGAGAGGATTGCGCGTCGATTCTCACC  
AATGCTCGAGCAGTACAGCAATATCTCGGCTATATCGACCAAGATATCATCAATAAGAAA  
GTGTCGCGTCTAGGGATGTTAACCAGATTTTTACTGAGATGGCGCGCGCTATCATCAGA  
GCAATTAGCCGGAATAATATTGGAAAGGACATGCGGTCA

>RXA00921-downstream  
TGAACGTGATTGCGACTGGATTCC

>RXA00926-upstream  
ATGGAGACACCTGGGGCTGGAACCACCAGAAGGCACCATCGGCGATTATTAGCCACCTTA  
GGTGGCCAGGATGTTCCATGGTCTGGCAAACCTAATAACC

>RXA00926  
ATGGACATCGTTTTTCCTCATAATTCCTTAGCCATTTTTATCGTTCCCACTTTCTCATG  
AGCCGCCGCCAGCGCGCACGGATGACTGAAATCCAAAAGCTGCAGGACTCTGTCTGCCA  
GGCGACCGCATCGTCACCACCGCGGGACAGCACGAACGGTCATTTCCACCCTGCAGAA  
ACCGTTGATCTAGAGATCGCGCCGGGTATGATCAGCACTTTTGAAAAGCTTGCTATCGTG  
CGTGTGCTGTCCAAGGCCAATGAACCTCAGATGTTGGATGAGCCGACGCTGTTTGTATCAG  
CCAGAAGACGATCAGCCGAACGATGGTTTTCGATGGACGCACTGACGGACATCCTGAGAAT  
CGT

>RXA00926-downstream  
TAGAAATTAATAATAATTCAGCA

>RXA00930-upstream  
ACGGCGCACACACATTTGGTGGTGTATTGAGCTATCTCTGGGCTGCGTGAGAAACCATT  
TTCCGGTGGATGATGGAAGCTAGACGACGAAAGGGAGCAT

>RXA00930  
ATGTCTGGCCACTCAAAATGGGCGACTACCAAGCACAGAAGGCTGCTAACGACGCCAAG  
CGAGGCAAGGAATTTGCCAAGCTGATCAAGAACATCGAAGTTGCGGCACGTACAGGCGGT  
GGAGATCCGTCTGCGAACCACGCTTGATGACATGATCAAGAAAGCCAAGAAGGCTTCT  
GTGCCGAACGATAACATCGAACGTGCACGCAAGCGTGGCTCCGGCGAAGAAGCTGGTGGC

GCTGACTGGATGAACATCATGTACGAGGGATACGGCCCCAACGGCGTTGCCATGCTTATC  
GAGTGTCTGACCGACAACCGTAACCGCGCAGCTACCGAAGTTCGCACCGCAATGACCAAA  
AACGGTGGCAACTTGGGCGAGTCCGGTTCCGTGTCTTACATGTTACCCCGCACCGGTGTC  
GTCACCGTACAAAAGGGCGATCTTAGTGAAGATGACGTGCTCATGGCTGTTCTTGAAGCT  
GGTGTGAAGAAGTCAACGACAACGGCGATCTGTTTCGAGGTTACCTGCGCACCAACTGAC  
ATTCAGGCTGTTTCGCGACGCACTCGTGAAGCTGGCATTGAAGTAGAAGATTCTGAATCA  
GACTTCCGGGCATCTGTTTCAGGTCCCCCTGGACGCTGACGGTGCACGCAAGATCTTCAAG  
CTTGTGGACGCGTTGGAAGATTCCGACGATGTGCAAAACGTCTACACCAACATCGACTTG  
AGCGATGAGGTTTTGACAGAGCTGGAAAACGAC

>RXA00930-downstream  
TAGTTCGTATTTTCCGCACTCCG

>RXA00932-upstream  
CCCAATTAATTTATGCACTTCGGTGAGGTTACTCACAAAGAGTAGCGTGCAAAGCCCAGC  
AATAAGGTGATGTTTCAACGATTAGGTTACGGTAGGGGCC

>RXA00932  
ATGACGCCACAGAACTTCACCGTTTTGCGAGCCCTTTTAGAAATGGGTACCTGGACCCTG  
CTGATCATCGGCATGATCTTAAATACAGTGGAGTGACAGACGCCGTAAACCCCTATTGCC  
GGCGGTATCCACGGCTTTGGCTTCCTCTGTTTTGCGAGCCATCACCATCACCGTGTGGATC  
AATAATAAGTGGACATTCCCGCAGGGTATCGCAGGTTTGATCGTCTCTGTTATCCCGTGG  
GCTGCATTGCCATTTGCATTTGTGGGCGAGACAAGAAGGGCCTCGTTGCCGGCGGATGGCGC  
TTTTTCAGATCCGTCCGAAAAGCCACACACTTTCTTTGACAAGATCTTGGCTCAATTGGTC  
AGGCACCCAATCCGATCCATTTTAATTCTGCTGGTGATTATCGCCGTCGTCTTCTCTATC  
TTGCTGGCGATGGGACCACCTTATGATCCAGATGCCATCGCAAACACTGTGGAT

>RXA00932-downstream  
TAAACAACAGCCTCCTTCACATG

>RXA00933-upstream  
CCGCGGGGCTAAAGCGCGCAAACGCCTACGACTGGTCGACAGTATCCACCCAGGTCATGG  
CAGTCTATGAAACCATTGGCATCGACAAAGTGAGGCTTGG

>RXA00933  
ATGACCCCTGTTTACCTCCTCATCGCTGTGCTGTACCGCAACTGTTCTGTGGGCGTAT  
TTCACAGCACAAACGCCTCAACCGGCTCCACATCCGCACCGACTCAGCAAGACAAGCCCTG  
CAAGCAGCACTGGATCGCCGAGCAGCACTAGTAGGTGCGTTGTTGCCCGATGCAGCAGAA  
GCCTCAAAACGCGCTGAGGCAATTCCCTGGAATACTCCCGCTTCTCCCAACGCGCCCGC  
GCCGAACGAGAAATCTCTGAACCTCATCTGAAACAGGGGAAGACCCCTCCAGATTCCATC  
GTGGACGCTGCCACCCGCGTGGAATTAGCCACCGCTTCTACAACGAAGCCGTCAGTGAC  
ACCCGCGATCTTCGAACCCGATTGATGGTCAGATCCTTCCGACTCGGCGGCACCGCACCC  
TTGCCGGAGTACTTCGAACCTACTCGATACAGATCTGCTGACT

>RXA00933-downstream  
TAAATGTAAAAAAGCCTCCTTCA

>RXA00940-upstream  
TGCTCAACGGCAGCTGAAGGGCACGGACATGGACATCATCACGGCAGGCGACCCGGACG  
TGGTCGCGGTGGACGTGCTGGCAGAGGCGATCTGCGCAAT

>RXA00940  
GTGATTTTGGTGTGCTGGAAGCTGAGTCAATGCGCGGCTACCAGATCATCACCACCATC  
AGTGAGCAAACAGAAGGTAACCTGGACTCCAAGCCCAGGAACCATCTATCCAACCTTGTCC  
ATGCTTGAAGATGAAGGCCTGATTTCCATCTCCCATGAAATGGGCAGAAAAATGGCGCGC  
CTTACAGAAGAAGGCGCGCAGGAAGTGGCAAAGAACAAGGATGCGTGGGGATCAATTCTG  
GAGGCTTATCGCAATCCAGAATCCCGAGAGGTGCGGGTGTTTAACATTGCTCTGAGTTT  
CACAAGGTCAGGGAAGCAGCGAAAGCTGCTCCCGACGATAAAGCAGAGCAAATAATCGAG

ATTTTAAGGAGAGCAGCAGATGACATCAAGAGACTA

>RXA00940-downstream  
TAACCCAGTACCATGCAGCTGC

>RXA00943  
AAGCCTGGCGTGAAGTGGCGTGCAACCAATGCTACAAAGCGTGGCAAGAAGCAGCTGCAG  
CAGGCACTTTCAACCAAATCTGAGACTGAAAAGTTCCGGTGAGAAGGCCTCTGATTGGTTTC  
AACGATACTTCTGACAAGGTACCCGAGTACGCGTACACCGCTCAGGATTTGTCCGGTGAG  
AACAAGGATGACTGGATCAAGTCCGCAACCGAGACTGCTCACAAGGTGCTGATACTGTG  
AGCGATTACGCTCACAAGGCTACCTCTTACCTTGAGGAGAACAGCGGTGACTGGCTTGAG  
GCTGCGCAGGCTAACGCCAAGACTGCTCGTAAGTCTGCAGTGAAGGCTGCCGGCAAGGCT  
CACGAAAAGGCTAACTTTGCTCTTCAGGTTCGAGAGGAAACCTCTGGTCGCGCCAACAAG  
AAGGCAACTAAGAGCTACGACAAGCTTCAGAAGCAGGCTGATAAGGCCATCGATCGTGCA  
CAGAAGAAGCTGAAGGGCATCGAAGCTT

>RXA00943-downstream  
TAAGTAACTTCTTCCTGATTGAG

>RXA00946-upstream  
GGGCCGGTGTGAATAAAACACCTTCCCCAAATAGACAGCATGGTCTAGATTAGCTTGAAA  
CGAAAGCGTACATTTCGAGCAACTAACGGAAAGCACACTC

>RXA00946  
ATGACTCACACTCTGCAGGCAACTAATCCCCCTTGATCAAACCGCTTGGCAGCTTGGCAT  
TTCTCCCGAAACAAAGAGGCCATCAGCCGCACCGCGCCACCAGCCTGAGTGCCACAGAG  
TGGATTAGCGCCACCACACTCAAGGACGCGCACACTTTTCCTTCACTTCCCGGGCGATGG  
TATAAACGAGGCGGCGGGGTAGTGGGAGCACATTTACCACCAGCTTTCGCAACAACCTGGA  
ACGGTGCAACTGCGCCCCGGTGAGCTCTTGATAGCGGAAGATTTACCCCTCACCGTCATT  
GAACGGCTTGGACAGTTTGCACCTTCAGGTTTTTGATGCACGCAATCCGAAGCGTTTTGAA  
TTCCACTCCATCGCAGCTTTCCACCGTCCGAGGAATGGCGGATTGAGGCTCGCTTCTTC  
CCGGAACCTGACACTGTTAACACCGCTGCAGCTGATGGAGTTATCGTTGCCACGCCTACT  
GCGGGTTGGGTGCACTTTTTGAAGGGCCGCTCTGGATTACCGTCTTCGTGTAACCGTTTCAG  
AAGAAATATCACGGCTATTTAGCGCAATTCCTCGACGTGGGCGTTTTATCAGCAT  
CGTTTTGTGCGACATCCACGCCCCGATGCGGAGGGAAACACCATCATTGATTTCAACCGC  
GCTTATCTTCCCCCAAAGGCATTGAACCGAAAGTTCTGTGCCCATCGCCCAGCCTGAAC  
AACCACCTCAATCTCACCGTGGAGGCAGGGGAGAAGTGGGTGGTTGCTGGAGGA

>RXA00946-downstream  
TAATACTTGCTAACCGTCCTAAA

>RXA00949-upstream  
GCTCAAGGATCCCTTCCTGGGCAAACCAAGCAGCCCTCGCACTAGGTGCGGAACCCAGGTA  
TGTTACCAATACGACTACGTACTTTAAAGGAGAGTTGAC

>RXA00949  
ATGAAGGTTTTTCATCATCGGCGCTGCGGGTGGCATCGGCAATCGACTTTCCAGCCTGCTT  
CACGCCAGGGGAGATGCAGTTAGCGGCATGCACCGCAATCTTGAGCAGGCCTCAAAAATC  
ACAGACACTGGGGCAACTGCCGTACTCGGGGATCTCATCCACAACAGCACGGAGGAGCTT  
GCGGAGCTTTTCCGCGGTACGATGCCATCGTATTTCTGCAGGCGCCACGGAACAGGG  
CAAGAAAATACCACGCTTATCGACGGCGCCCGGCTCCGTAAAGCCGCCGACGCTGCCAGC  
GCGGCCAACGTTTACGCTTCATCTTGGTCTCTGCGTTTCCGGAATCCTCCCGCGGGGAG  
AACACCACCGAGAACTTTGAGCACTATATGAAGGTGAAGAAGTCCGCCGATGTCTACCTC  
AGTCACACTGACCTAGACTGGGTATTGTCCGACCAGGCGTGCTTCAAGATGAGGCAGGG  
GATGGTTTAGTCACTGCTGGCTTAGCGATTAATTACGGCAATGTTGCTCGCGATAATGTC  
GCAGCGTTCATTGATGAAGCTCTGCATCAACCGCAGTTGTCAAAGATCATTGTTGAACCTC  
ACCGACGGTTCAACTCCGGTGGCGGAAGCCGTAGAACGCCTCATCAAG

>RXA00949-downstream  
TAAAGACGAAAAGAGGGAGAATG

>RXA00959-upstream  
TTTGGAGGCGGAGCATCATACCTTTTAATGTCAGGATCGTGCAGTGAAGAATTCAGGATG  
AATTACTCGCTGGAATATTGGTGGGGATAGAGTTGTTGTT

>RXA00959  
ATGACGGTGCATCGGAATTATTCTTGGCAGCCTTTTTGGCGTTCTTGCAGTCCCTCTCATC  
GTGGTTGGTGCTTTGGGGTGGGCGGCTAAGCTCCCTGGCAACCCGGTTGTGGGCATTCGT  
GTCCCTGAGGTGCGTAAATCCCAAGAATTGTGGGATATGGCGCACCGTGTGCTGGCCCG  
TTGTGGGTGCTGTGCGGAGTTTCCTTTGTTATTGCATCGCTAGTTGCGTTTGTGCTTCT  
GGTTGGATGTGGCTTGTGTGGCGTTGGGTGTTGAGGCTGCCATCGCGTTCATTGGTATG  
GGTGCGGGTATGGCTGCGCATACTGGT

>RXA00963-upstream  
CTGGCTCTGACGGCGTCGACTTGTCTGCTTCTCTGATACACCAATTTTCGAGGCCCTTA  
ACCTCGCACGTACTTTTACTCCGGAAGGAATCTAGAACTT

>RXA00963  
ATGCGTCTTGCAACAATCCGCACCAACGGCACCACCATTGCTGCTCGTGTTGAATCTGAA  
AACACCGCTACCACCATCGAGGGCTTTGCCAACGTCGGTGAATTACTCCAGGAATCCAAC  
TGGCGCGAGCTGGCAGAAAACGCTGCTGGTGAGGCTGTGACCTTTGAAAACAAGGAGCTA  
GATGCAGTAGTTCCAGCACCTAAGAAGATTGTGTGCGTCGGCCTTAACCTACGCCAACAC  
ATTAAAGAAATGGGCCGCGACCTCCCTGATACCCCAACCCTTTTTGTAAAGTCCCTGAC  
GCGCTCATCGGACCTTTCGATGATGTTGTCGTTCCAGAGTGGGCTAACAAGGCTCTCGAC  
TGGGAAGGCGAGATGGCAGTTATCATTTGGCAAGCGCGCACGCCGTGTCAAGCAGGCCGAT  
GCTGCTGAGTACATCGCT

>RXA00969  
ATCCGACAGGAAGAGCGCGATGATGATGCACGTCTGATCGTGGTCACCCACTCTGCGCTG  
GAATCTGATCTTTCCCGCACCGTTGAATGCTGAAGGCTAAGCCTGTTGTTAAGGCAATC  
AACAGTGTGATCCGCCTCGAAAGGGAC

>RXA00969-downstream  
TAATTTTACTGACATGGCAATTG

>RXA00971  
AACCACGCCGAAGCCGAAGAACTCGACGAAGCCCTCTCCCCGCTCATTAACCGCCTCCGC  
GAAATGGGCTTTGACCCACCGAAACCGAAGAAGCAAACCTCCCTCGCTCTACACAGCTGC  
CCATTTGTGGTCAACGACAAACGCCCATCAGCCTTCGTCTGCGCCATCCACGCCGGATT  
ATCCAAGAAAGCCTCGGTGAAAAACAACCGCATCCAGCTGGAACCTCAAACCACTCAACGCG  
CCGGGCACCTGTAAGGTTACGTGTTTACGCGAA

>RXA00971-downstream  
TAATTGCTGCACTAATAAGCCCC

>RXA00973-upstream  
TTGTTGGTGAGGCTTACAGCCATTGCACTGAGTTCCATGCTGTCGAGCCAGTACAGG  
CCTTACCATTGACCATGAGATGGTGAGTGATTTTTTAC

>RXA00973  
ATGAACCACTCTGACGACGATCGCATGCAAAAGTGGTTCCAGATCCGCCGCGAACTGGGC  
AAAGAAATTGTGAAACAGCTTCAAAAGGATCTGCCCCGAGTCGCCTCTGACATCGGCTCC  
ATGGTGTATTCTCTGATCAAGTTCCCTTCGGAAACGCCACGCTCACTGCATACGGAGAC  
ATCGGCAACCGAGTCGCTTCCGCTGCAACAAGTGCGAGATACAACGTAGAGGAACTCCTG

GACGCAATCGAAAACGCACGATTTGCCATCTGGGTTCCAAATTACGACAACCTCTACTAC  
CTCTCCGGCGAGGAAGGTGCCGACGAATTCCAAACATACCTCATCAAAGATGCGTCAAGA  
TTTCTTGAATCCTCCGGGAATACTCCACCCGAGAACCCGAGTACAGCGACTCCAAATTA  
ACCTTTGCTAGCGAACTACTCCCTTCTACACCGCATTTAACAACCTCGACCTACCCACTA  
CTTCATGCTTGTGTGCAAGGTGAACCAACTGAAGTAGACCTCTACTTCTACGAGCTCGAG  
CAGGCAGAATTGAAGGAAAAAGAGACTGCACAGCTCTCGAGTGGATCAAGTTTGGCTCC  
AGT

>RXA00973-downstream  
TAGTCAGAATTCTCCTAAAGGGC

>RXA00978-upstream  
TCCTGGGTAGCATGGGCTTATGAGCACTGATAGCCAAAACCCTGTAAGAAAATCCTGCGC  
ACAGCCACATTCTTGTTCCTAAGAGGTGCGATTGAAAGCG

>RXA00978  
ATGTCCAGGTCAACGCTTACTAAAGGTCTAAATCAACTGAACACCTCGAGTTAGATAAG  
TCACTAAGTGCCTGGTTCGTGGGCAGAAGATGATCCTTTGTACCTCGCAGGTGAGAACTTA  
AACGGCAGTTACTCTGATTCGCGAGGACGAGTGCGGGTCTCTCGCGACACCATCGACGGG  
AAAGAAGCTACCGTTGATATTGCAACGCCCGCGCATGTTATTGGTGCGATAGATACAGAA  
CCTCAGCCGGCAGTAGATTCCGCTTGGGCAATAGAAACCACTGTGCGCTGTTTCTTCCA  
GCAACCGCTTGGCAACTGTGATTGAACAGCATCCAAGTTTGTCTTGGCGATGATTCGG  
ATGCAGCAGCAACGTTTGGCTACAGCCAGAGATCATGAAATTAACCTGACTACGACCACA  
GTTGAGCAACGAGTAGCTATTGCAGTGAGAACTCTGGGACGAAAAATCGGGCAACGACGA  
CCCGATGGAATCTTGCTCATTCAAGTTCGAATCCGGCGGGAAGATGTTGCGGGTTTAGCA  
GGCACCACCGTGGAATCTACTTCTAGAGTTTGGCGCGATTACGTAAAGAAGGGGTCATT  
GATAGCGGTAGGGAA

>RXA00978-downstream  
TGATTGCCGTGGTTCGATGAACGG

>RXA00986-upstream  
CTACTTTGATAACACCGCCACCCAAGCCAAGCCGGAGTGATCTCCGTATCCTTTAAGGC

>RXA00986  
ATGACTTTAAAAGATAAGTACGACACTGAAGTAGCTGTTTCTAATAATCAGGACAAGCAC  
CAATTTGAGGTGAGTTACCTGAAGATGCCGTGACTGCTGGCTTTGCTGCATACCTTGAT  
AAAGGTGATTTCGCGGATCTTCTATCACACCGTTGTTGGCGATGAATTCGGTGGCAAGGGA  
CTTGCGTCAATTCTTGTTCAGAGGCGTTAAAAGCCACAAAAGAAGCTGGTCTTACCGTG  
GTTCCGGTATGTCCCTTTGTTAAAGGATTTCGTGGAAGAAGACGATTCGAGGGTTACCGC  
AAACCAAACCATGAGGATATGGAGCTGGTGAAGAGCCAGATG

>RXA00986-downstream  
TAGAACTACTCAACTTCCAGAA

>RXA00987-upstream  
CGCGGGCTGCTTACCACGCAGCACAGCTTAAGCTTTAAGGCCCTCCGGGGCCTTTTTTGCT  
TTTCGACGCCTACCTCCTTCGGAGGCGTATTCTGTGCTTC

>RXA00987  
ATGCCTAAATCTCTGACCTTTGAAGACAGCATTAACATCGCAGCGCCCATCAATCAGGTC  
TACGCACTAGTTTCTGACATCACTCGAACTGGAGAATGGTCGCCCGTGTGTGAGAAATGC  
TGGTGGGATGAAGACGAAGGCCCGCTCGTGGGTGCGCACTTTACTGGCCGAAACGTCACA  
CCTGAGCGCACCTGGGAGACACGGAGCGAGGTTATCGTCGCAGAGCCAAATCGTTGCTTT  
GGTTGGAGCGTGACTGATGGAACGTCAGTGGATTTATTCATGGAACCGTTAGAAGAA  
GGCACAGTATTGACTGAATCATGGGAATTTACCCCCAAAGGTCAACGATTCTTCCACGAC  
AAATTCGGCGACAAATCAATTGAAGAAATTGAAAAGCGACGCTTGGCAGCTATAACCGGA  
ATTCCAGAAACACTGGTTGCCATTTCAGCGCATTTCTGGAAGTTGAG

>RXA00987-downstream  
TAGTTTCTACATCTGGCTCTTCA

RXA00988-upstream  
TAGCAGAAGACACCGATGTACAGTCCGGATCAGGTGTTGTGATCACCGGTTCAATCGTGA  
CCGCCGGCGATGCGCGCACGCTGTTTGGAAGGAACCTGC

>RXA00988  
ATGAGCAAGCTGAAGAATCAATTGAGTACGGACCATTAGGCAAAGGCCACGATCCATTA  
AAGGATCCCATGAAGGGTATCCGAGGTGTCATGGCCGGCACCTTAGTGATGGAAGCAATC  
ACCTTAGGTCTTGTCTCACCGTGATTCTGCGCGTGGACGACGGCATCTACTGGACCACC  
TTCAACTGGGTCTATGTATCAGCAGTCCGATCGCACACTTTGTTGCTGCATTTCTGCAA  
AGGTTTAGTTGGTCCATCCCGATGAACATCGTGCTGCAGGTTCTTGCACTTGCCGGTTTC  
TTTGTTCACCCGCGATGGGCTTCGCCGCCATCATCTTCATCATCGCGTGGGCGTACCTG  
TTCTACCTGCGCTCTAATCTGATTGATCGCATGAAACGCGGGCTGCTTACCACGCAGCAC  
AGC

>RXA00988-downstream  
TAAGCTTTAAGGCCCTCCGGGGC

>RXA01005-upstream  
TGGGCACCGTCAACGATTGGACTCACGAAAGCTCCGACGACTAGAAATAGTAACGTGTGT  
GGACACTTTTACCTCCGCGTATTGAGCGAGGATGAGTGG

>RXA01005  
ATGGAAGTAGCCCGCGCCACCACGCGCGGGCTGATTTCATTACCAAAGACCACCTGAAG  
CGTCGACAAGCGCATATCAAGCACCCCGTCTTCGACTTCCTCTTCGAGTACTACCCCGTG  
CGCGTCGCGCACCTAAAAACCTGGCACCCCGGCATCGGCGTGTTCTAGAAGGCACACCG  
CCGATGCCACCATGCGCGATTTTTTGTCTGTCGACGCCTCCCTCCATCACGCAGCCGGC  
GTCCAGCTTGACCTGGCCTCCTATATGCAACGCCGTGGGTCCCTCTGTGCGCTACATCCAC  
GAAGTGTGTCCGCCACCCGCGACAACCACGCCCAATTTGATTGTTTGGTCTGCACGAA  
TGGGCAATGGTGTACAAATCAAACGATCTCCGCCATGACCTTCCCTTGCGCCTTACCCCA  
TCGGAAACCGACCGTGTGGTGGAAGCCACAACATCAAATGCACCCACTTTGATGCCTAC  
CGATTCTTCACCACACCGCCATCCCGTTGAACCTCACGGTGTTAACCCGCGAAGATCAG  
CCACGCAACGATCAATGTGGTTGTCTGCATGCCACGATGGATCTATACAAATGGTCCGCA  
AAGCTTGGCCCTCTTGTGCCAGGTGATCTTTTCTTGACGCGTTTGAAGTAGCCCGCGAC  
ACCCGCATCTTGGACATGGAGGCTTCGCCTTACGACGTCCGCGGATACGGCTTTGGCTAC  
GTCCCCATTGAGACCGCCGAGGGCAAAGCCGAATATGTCAGTAGACAACGCGAGCTGTCT  
GAACGAGCAAAACCCATCCGTGACCGGCTTGTCTCCATTACTAAACAAGCTCTACAGGCT  
AGTATT

>RXA01005-downstream  
TAGAAAATTAGACTTGTCAATGT

>RXA01007-upstream  
TCTGAACCAATATACCGATCAGTCTAAAAGTGTGTTAAGTTCTGGAACATAAATTAGCTG  
ACACGTAAAGTAACCTTAAAGATTAAGTGGAGGTAAGCCTA

>RXA01007  
GTGTTTAAAAAGCACAGACACGGTCTCGGCTCCCCCGAAACCAAACCACGCTCAATAACC  
CGCCGGTTTTTACCGCGGCCGCCGTACGCTGGCAGGATTGGCAGTCCGTGTCGGCTGC  
ACAGCACAACCTTACAAGCAGAAGACAACACGCTCACTTACTTAGAGCCACAGTTCTTC  
CGCACCTGTACCCACCATCAGCGGGCTTTTACCCCAACGGCAGTGTGGTGAACAACATT  
GCAGACCGCTTGCTCTACCAGGATCCTGAAACCTTGGAACCAAGCCGTGGATCGCCACC  
GAAGTCCCAGAAGTAAACGAAGACGCCACGGAATTTACCTTCAACATCCGCACCGATGTC  
ACCTACTCCGATGGCACCCCGCTGACGGCTGAAAACGTGGTGAAAACTTCGATCTCTAT  
GGCCTCGGCGATCAAGATCGACGCCTACCATCTCTGAGCAGATCACCACCTACGACCAC

GGCGAAGTAGTAGATGAGGACACCGTCCGATTCCACTTCTCTGAGCCTGCACCTGGTTTT  
GCTCAGGCCACCACTCCTTCAACGCTGGCCTTTATGCCGATTCCACCTTGGAGTTCGCC  
AATGAGGATTTTCGCGCAGGCAACGCCAAAACGTCATCGGCTCCGGTCTTTTCGTGATC  
ACCGATGAAACCTTAGGCACCAACCTCACCTTGACTGCGCGTGAGGATTACGATTGGGCA  
CCACCATCACGCGAACATCAAGGTCGCGCGAAGCTTGACGCCGTCAATTATGTCCTCGCG  
GGTGAAGAATCCGTCCGCATCGGAGCCATCGTTGCTGGCCAAGGTGATATCGCCCCGAG  
ATCGAAGCGCCAGTGAGGACACCTGAAGGATGCAGGCATCCCGATCATCTCCGCAGCC  
ACCAACGGTGTGAACAACAGCTTCAACTTCCGCTTCAAAAACGAGCTGCTCTCAGACAFC  
CGTGTTCGCCAAGCTCTGATCCACGCGATCGACCGCGAAAAGATCATGCGTGTGCTGTTT  
AGTGATTCTTATCCGCTGGCAACTTCTGTGCTTGCGCAAAATGCACTGGGCTACAAAGAA  
CAAGTAGATTGCCTATGTCTACGACCTAGACAAAGCAACAGCTCTGCTTGACGAAGCCGGC  
TGGACCCTTGATAGCGGACGCGTTCGCGCAAGGACGGTGAACCTCTAGAGCTCACCTTC  
AACGAAGCCCTCCACAGCCTCGTTACGCGAAGTTGTACCATGGTCCAAGAAGAGCTC  
GGTGATCTGGGCATCAAGGTCAACCTCAACCCAGGTGACCAAGCAGCCAGGACGCTGAC  
TCCAAGGATCTCAACAAGATCCAGGTTCCGACACCATGGTGGGTGCGCAGACTATGAC  
GTGCTGAAATCCCAGCTGTACTCCACCAACCGCAACGAGCTGTTGAACATGACCGTGAA  
GGGGAGACCGCCGATATTGGCGATCCTCATTGAGGAACTCCTCATGGCTATTGCATCC  
AGCCCACGCGAAGAGGACCGTGCAGCAGCATCTGCCGACGACAGGATTACATCACCGAG  
CAGGCATATGTTCTTCCACTGTTGAAGAGCCAGTTGTCTACGGCGTGACGCTTACGTG  
AAGGGCTTTAGCCCCGAAGTGATCGGCCGCCAGCTTCTATGAGACCTACATTGACCAT  
TCCAGCGACCATTCAGTGAGGAGGAC

>RXA01007-downstream  
TAAATGACTACCTCGCAGATTCT

>RXA01008-upstream  
ATTTATGTTCCAGAACTTAACACACTTTTAGACTGATCGGTATATTGGTTCAGACCAACC  
TGTCTAATTGGGGTATTTATTTAATGATCAGGAGTTTTT

>RXA01008  
GTGAGCACAACCGATAAGCAGGTAGCCATCGTTGGAGTTGGCCCCAGAGGTATTTCCATA  
CTCGAAAGGATCGCAGCAGCTCTCAACACAGTTTCCCGCCCCAAACAAGGCTTGACCATC  
CACCTGATTGAGGATGCCCAGATGGGTGCAGGCAACGTGTGGCGCACTGATCAAACCCGC  
ACGCTGTGCATGAATACTCTGGCCGGTGCAGGTCATTATTCACAGAGCCAGGCTCTACG  
GTGAGCGCTCCAGTGGTGAAGGACCACTGCAATTTGATTGGATTGCGCTGCTGCGCGG  
GATGAGGATTTGAGCGGCATTCCTACAAAAGCCATCGAGCTGTTCCGCACTACCCCCCA  
GCTGCATCCGTGGCGGAGGATTTCAAGGAAGAGCTAGCAGCCACTGTTATCCAGTCCAAT  
CCTTCCCGTGCTCTTTATGGCGCATATCTGCGGTGGGCTTTCGATGTCGCTTTGCAGCTG  
TTGCCACAGTGGGTCAAGGTCGAGCAGCACCATGCGCGCGGATTTGGCATCCGCGAAGAT  
GGTGACCGCGATGTGATCACCTTAGATAATTCTGAGATGATTTCGCGCGATTCCACTGTG  
TTGGCTGTGCGGCTGGCAAACCCCGCCCCCAATGCGGAGGAGCTGTCCATCGCGGCTGCT  
TTGGAGGAGAACCCTGATCTGGTGTGGGTCAAGCCCCGCAACCTGTGAGCAGGATGCC  
AGCCTCATTTCCGCTGGCGAACAGGTGCTTGTCCGCGGGCTGGGCATGGGATTTTTCGAT  
ATCATGGCGCTGACCACCATCGATCGTGGCGGCATCTTCCACGAGGATCCAGCACCCTG  
TCCGGTTTTCGCTACGAGGCATCTGGTGAGGAACCACTTTGTTATTTTCCCTCCGGGCGC  
GGCTACCCCTACCTGCCATAATCCGATTACAAATCGCTGCCACCAGGGGCAAAGCTAGCG  
CGACTCAAGGCTGTTATCGCGGCGATCAACGCGCAAAATCGTGGTGTGCGATCCATCAAC  
TATGATGCGGAAGTGTGGCCAGCTGTTGCTCGCGACGCTACGAAGCCTATTACGAAACC  
CTTGATCGCGTAAGCCCAGAATCTATCCGACCGGTCTGGATAAAATTGTGGAAATTATT  
GATGAGGTGGACGTCGATAAGCTTCTTAAAGCACTCGCCGCGCACACCGATGACGTCTTT  
GACCTGCATGCTTGGGAATTTCCGCTCGCGGGAATTAATGAAAGCGTCGAGGCGCTGACC  
GCACGCATCGCGACGGCATGGCCCGCATATTGCCATGCAGTAACGGCCTGGGACAGC  
CCGCTGAAATCCGCGCTGTGGTCCATTTCCGCGCGCGCAAACCCAGCTCCATCCTGGGC  
GCGGAAGGCTTCCGCTTCAATCGCGCGCAACCGCTTCGCGCGCGTCATGGCGATC  
GGCCAGATGGTCCGCTCCGGCCACCGCTTTTCCGCACCCGCGAATTTCTTGCCTTGTG  
GACGCCGGCCTCGCTCACTTCGCGGCGCGCCGCCCCGCTCAGCGTGAGCGACGGTCAA  
TGCCAGATCTCCTCGCCACCACCGGCGATACGCGCTGAGATCGAAAGTGCTTGTGAC  
GCGTGAGTGCACAACCCAGATGTGCGTCGCAACGCCGACCCGCTAGCACTGTCTTTGGAA  
GATGCCGACCGGGTACGCCCCCTTCAACGACTATTCCGTCGACGGAACCGCTGCCCCCACA  
GGCTCCCCCGAAGTTGATCCGGCAACCCGACTTTTGGTTCACCCCAACGGCAACCTCGAT

CCGCGCGTGACCTGATTGGCATCCCAACCTATGGGCAGCTGGCCGACACCACCATCTCG  
CCGATGCCTGGAACCAACCCGCTCATGCTGCAAGAAACCGACAAAACAGCCGTTACAGTG  
CTAAAGCAGCTCGGCTTGATC

>RXA01008-downstream  
TAGGGTGAGGTGAGTTATTTAAA

>RXA01011-upstream  
CCCGCAAACCGATTTCACCTCGCCGACTCATCGACGCGATCCCAGGATCGCGCTATCGTGG  
TGGCGAACTCAATCTTGGACTATAGGAGCAGATCTTAAAA

>RXA01011  
ATGTCAGATCTCATCGACATGCTGGTTGGAGAAGACCTCCCACAGCTGCGTGACAACCGT  
CCCCAAGCTCGCGACAATGCACAAAAGAGCTTTCGAAGCTCTGCTCGAACCGGTCAACCCA  
GGAACCTTCAGCTTCGGCGAGCGTTACGCCGTGGCCACCTATGTTGCAGGTTTGCACCAA  
TTCGCGCCAGCTGTAGATCTCTACCAAGATTGCTTCTCGACGACGCCCCAACCCCTG  
GCAAACGCCGTCTCCGATGCCATCGACGAGGGCCTATCCGACGGCCCATACGGCACCTAC  
CGTGAACCTGGACTTGAGTCCGAATCAGAGCCAGGCGGATCTGTGCGCAACGATGCCGCC  
AAGCTTGGCGAGCGACTTGCAGCAGCATTTTGATTACGCACACCTACTAGTTTCCACCCC  
CGTGATTCCCGCCCCGAGGTCCCTTGGTGCAGTCTCCGGCGCTGGCTGGAGCGCGGATGAC  
ACCGTGACATTGGCTCAGCTGGTGTCTGCTTCCCTGGCATTCCAGCTGCGTGTTCCTACGGC  
CTGCGCACCCCTCAAAGGTGAAGACATTCAGGTGAAAGCTCCTCGCCTGAGTATTCCTGAA  
GCGAAGTGGGAACGTGTCACAACCGGCTTTTGAGATCTCCACCTATGAAGAACTCAACCGC  
CCTGAAGCGTTTGTGAACCACTCTTTGGGCTGGAAGCCATGGGTACCACCAGTAGCAAAG  
GCAGATCTCACCGAAGAACAGCTGGATTCTTTGATCCAGCCTGAGCGCGCTGATATGCCA  
TACTTCCGTCTCTTGGCACGCGATCCTGCAGCATTGAAGGCGCGTACCCTGACCGATCTG  
GATATCTTCTTCAACACTGACGGCGAAGGCCTAGGACGTGCAGAGCGTGAACTCGGCGCC  
ACCGTTACTTCCCGCTACAACGGCTGCGTGTACTGCGCATCCGTGCACGCAGGACGTGCT  
CAGGAAGAATCCGGTCGAGCTGATGATGTCAACGCACTGTTGGCAAGCATCGACTCCGAT  
CTGGGTTCTGACCAAGTGAATGTCATCCGTGACGCTGCTCGCGCACTGAGCTCCACCCCT  
GCTGCTTTCAACAGGGATGCATCACCAAGCTGCGTGGCGTTGGATTACGCGACCTGCAG  
ATCGTGGACTTGATCAACTCTGTGGCGTTCTTCAACTGGGCGAACC GCCTGATGTTGTCA  
CTGGGTGAACCCGAAGTGCCAAAGCGTTTCCTG

>RXA01011-downstream  
TAAACGCATAACCCCGAATACC

>RXA01016-upstream  
TGCCCGTCGAGGTGAACGCCCAAGAATAGTTCTCTTTTCGTGCGACTTCTCACGTTGATACC  
GCTCGGCATCATCCACCAAATTTCTCCAGCCGGGTGAAGCA

>RXA01016  
TTGTTGCCGTATGCAATAGTCGGCCTGGTCAATTTTGCTGCCATCCTCCTGGTTGCCTCGT  
TGGGCTGTGCGAGTCCTTGGCGAAGTGTCGCTTGTGCCAGCGGTGGTTTTCGGTGGCGGG  
TTCCTGCTTATCCCCCAATGTTCCCTGATCGGTTACGCGCTCGTTAGGTATGGAGTAGTC  
GATCGGGCAGAGAACGCACCGCGGGCTATGGGAGTCTTTTTCGCCGTAAGCGCAGCAATC  
GCTATACCTACGCTGATCATCCAGGCACGTGACATCACTTCTTCAGGCTTCTCGATCGTT  
TCCACAGTGGCGGGACTCGCGCTTGGCGGCGTCTACATTTCTTTAGTGTTGCTGGCCTTG  
CATACACCGATTTCGCGGTGCACTCGCTGCAGTTTTCGCACCTTTAGGGCGTATGGCGCTA  
ACCAACTACATTGGTGCAACGATCCTCATGCTCATTTGGCGGGCTAATCGTGGATCTTCCA  
CACAGCACATCATGGACAGCTACGGTGCTCCTAGCTGCGGGTATTCTCATTATTCAAGAG  
CTACTTTCTGCTTTATGGTTGCGCCACTACACACAGGGGCCACTTGGGTATCTATGGCGT  
TGGGTGACTTGGGGAAGCCGTTCCCCCTTCCCTTACCCGTTCCGCATCA

>RXA01016-downstream  
TGACAGGTACGGAAGTGTCTTAC

>RXA01017-upstream



GAAATTTGAGGGGGCGCTACCCCTTAGAAGGTGCGCAATGACACCACGATAGTTCGCGCCT  
AGTGTGGATTGCTAGAAAACCTTTAAGAAAGAGGAAATAAT

>RXA01017

ATGGCTCAAAAAGTAACCTTCTGGTTCGATACCACCTGCCCATTCTGCTGGGTACCTCC  
CGCTGGATTAAAGGAAGTCGAACAAGTCCGCGATATTGAAATCCAGTGGGTCCAATGAGC  
CTCGCTGTCTTAAACGAAGGCCGTGATCTCCCAGAGGATTACAAGGAGCGCATGAAGGCT  
GCATGGGGACCAGCAGCGTTTTCGCAGCTGTCGCCACCGACCATGCTGACAAGCTCGGC  
GACCTGTACACCGCAATGGGTACCCGCATCCACAACGACGGTCGCGGACCAATCGAAGGT  
TCCTTCAATGATGTCATCGCAGAGGCATTGAAGAGGTGCGCCTAGACGCTGCACCTGGT  
GAAGTTGCAGACACCACGAATGGGACGACGCACTTCGCGCATTCACCAGACCGCAATG  
GACGAGGTGCGCAACGATGTCGGAACCCCAAGTGGTCAAGCTCGGCGACACCGCTTTCTTC  
GGCCCAAGTGTACCCGCATCCCACGCGGCGAGGAAGCAGGAGAGATCTTCGACGCTTCC  
TTCAAGCTCGCAAGCTATCCCCACTTCTTTGAAATCAAGCGCAGCCGCACTGAGAACCCA  
CAGTTCGAC

>RXA01017-downstream

TAATTAACGCTGTCTCTGCTTAT

>RXA01021-upstream

CGAGAGGCTTTTTTGGCTCTAAGCCTTTTAGTCGTGCGAACGAAATCTTAAGCAGCCTCG  
GTGCCACCGAGATCGATTGGTCGCTGTAAGGTATCTGATT

>RXA01021

ATGTCCAGTTCCGAAAGCTCGCGTTCCGAAGGCTCGCAGCCAGCACCGTCTGTACAGCCT  
GAACGCCGTGCTGATTCAACGGGGGCTCCTGCGGCAGCTTCCAAGGAAGCTTCCCAACAA  
ATGGACGCTGCCGGAGTTCTTGAGTGGGCCAGGACCGCTGTCGAGCAGCTTCTGAACGT  
CGTGCAGAGATCAATGCACTGAATGTCTTTCCTGTTCCAGATGCAGACACTGGATCAAAC  
ATGACCTACACCATGACAGCTGCGTTGGATGAAGCGCTGAAACTGGGGGAGTGGGTGAT  
GTCGCAAGGATTACTGAGGCTTTGGCTGTTGGTTCTGTGCGTGGAGCCCGAGGAAATCTT  
GGAGTAGTCCTTAGTCAGGTCCCTTCGCGCTATTGCTCAGGCAGCTGCTGACGGGGTTATT  
GATGGCCACACAATCCAAGAAGCGCTATCCATTGCTCGCTCCCTAGTTGATCGCGCAATT  
ACAGATCCTGTGGAGGGCACTGTTGTCACTGTGTTGCGTTCT

>RXA01023

CCAGCCAACGGGGGAATTAACAAAACCCCCATGATTATTGCCCTAGTGTATCTATTGTG  
TTGGTTTTTGGCGGTGCTGTTTCGGCGCCCGAGTCCCTCCTTGGCCCCGCGGCCAGCAACAG  
ATAGCCATGAGTGGGCTTCCCGCCCCAGACGCAGAATCTGCTGAGTGCGCCGCATTACTC  
GAGGATCTCCCCGGCGAGGCCCTTCGGGCACACCCGTGCAGAAATCATGGATCCTGTTC  
CCGGGCGCTGCCGCTGGTCCACCTCAGACCTCGAGCGTGTGACGCTGCGTTGTGGCGTC  
GATATGCCATTCCAGTACACCGCGCTCGCCAACACCGTCGACGTCGACGGCACCACCTGG  
CTACCTGTCTCCGACATGACCCCGGCTCCTCCCTGGAGACCTGGTACTCCGTCAACCGC  
TTCCCCGTCGTCGCCATCACCGCCGATGACATCAGCACCGACAGCGCCGACAACCCCGTC  
GACCCCTTCAGCAGCGCCGTCGACAAGCTAGAAAAGCGCGACGGCCAGCCCTTCGACGCC  
CCACTTACCGGCTTGAGCTCAGCCGGCACCACATGCACTTCGCTTTTCGACGCCCTCCCC  
CGCCAACTCGAAGTCGGCGGCGACGACGGCACAACGTACGAACGCATCGAGGAGGACCGC  
ATGCAGGCCCGCGGATACTCCGACGACGCAGTCGCGTGGGACACGCCGGGATTAGAACCC  
ATTGTGATCCGTTGCGGCGTGGAGCCTTCTGAGAACTACGCAGCCGGTGCCATGTTGCAG  
CAGATCGATGACATCCCGTGGTTTCGAGGACACCATTTTGGCTCCGGTACCACCTCGTCT  
ACCTGGTATGCCCTTGGACGCGAGATCGACATCGCCGTGTCTCTGCCTCAGGCTGCTTCC  
TCTTCCCTGATTACTATCTCCGGTTTCATTGAAGACACGGTTCCTGCGGAA

>RXA01023-downstream

TAAGACATAAAAAATCGCCCCAC

>RXA01028

TTTTACCAAAACATTTTGGCCTCTTCACGCGGTTCTAATACCTTCCTATTCTCTGTCCCC  
TATATCCCTGCAACAGAAGGAGAAGAAACCCACCTGCAACAGATACCAGCACTATTGCG

ACACCAACCTTGAGCTTTGATGCTTATGGTAATAAGGCCGAGGTCATGCCGACTCAATCC  
 ACTGTGGATAAGCGCGTGGCCTCTTTGCTGCAGTATTACACGCGTACATTCATGTGCGA  
 CAAGATACGCAGCAGGCTGTCTTTGATGTTATTGGCGCCAACCCGTCATCGCCGCA  
 GCAAAAGCTGCATCCATATCACCGGCTTCTGCTGATTACGTAGAAAGAAGGGCCTGGCC  
 TCCACCAACGCTGACCCAGTAGCCAAGCATGTACTAGAAATTGCAGGAGCTGATGTGGAA  
 TCGCTGCGCCATGAAAAGGATCTCAAGGTCACCAAGCACACTGGCCAAGACCCAGCACTG  
 CCTGTGCTGGTCTTTAACCACCAACCATTTGGCATAACCCCAACGACGATGTGATTAATGCA  
 TTAATGGGCGCTATTGACCAGGATGCCTACATTGACATGGCGATCTCGTCTACAACAAG  
 TCCTGGCACAACATTATCCCGGCT

>RXA01028-downstream  
 TAACTACCGCTGGGTAGACCCCT

RXA01029-upstream  
 ATGGGTGGTTGTCTTAATTAAGGGTGTGCGTGAAACACGCAACCGGAGAGGGGTGAA  
 GTGTGGGGTTCTTGCGGGCGTATGTCCGGGGTGCTTGCT

>RXA01029  
 ATGCTTCAAACGATTTTCATTCAAGAACTTAATTTATTAACAACCTTTAAAAGAAAAGGA  
 GAGCTGGTCATCATGATCACTCGTCACGATGTTCCCTACATCATCGCTCCGCCGTGTCTAC  
 GCGATCTTTGCGAGCCTGATGACCACGCCACCATGGTTTTATCGAACCACCTACACCATT  
 GACGGTTTCGATTTTAAGATCAGCTGGGTCTACACCATCACCATCTACATCAGCCTCATG  
 ATCCTCATTATCGGGTTCTACCAAGCCAATATGCGCAAAGCGTGCCCTTATGAGGAAGAT  
 CCTTTGGTCGATATTTGGCACAAGGTGTGGAGCACTGCACTCTTTATCCTACCTATCGTT  
 TTATCCATCGCGGTGTAATCACTGATCACACAGCGCGGGTTGACTGGTATGTCATGGTG  
 TTTATTCTCCCTGTAGGCTTGATGATCGCTTATGGATTCTTCAAGCCCTGTGATTGCGAC  
 AAACACCGT

>RXA01029-downstream  
 TAAGGTATACTTGTCGAAGACTT

>RXA01031-upstream  
 CAGCTGAACCTGATCATTTTGTATGATCTGCCAGTACAGCGCCAAGAAGATCTTGGCACCT  
 TAGTTGTTATCTCTGCTGTTACGCAAGCGACTCTGCGGC

>RXA01031  
 ATGAAACTGCTGCAATACGCAGGTGGTGCTGTCTATGTGATCCAGAAGATTCTGCGCAG  
 TCCCAAGACCTGGATGCCAGCACTGCACGTGATGTTATCGACGCTACCAACACCGCCATG  
 ACCACTATTACCTCTCGCCCCACCATGATTGTGCACCTGCACAAGGTGCGAAAAGTCATT  
 GAGATTTTATGCAACCCCTGCACTCGGCGGTGAACCTGTCAATATCGACCAGGACGAGACC  
 GGAACCAAGGTGTACACACCCACCCCAACGCTTGTGCGCTATCGCTTTATCTCTGACAAA  
 GAAATCCTGCTTCATTACCTGGCGCAGGCGGGTGTGACGGGTGTGGAGGTTTTTGACGGG  
 TCGCCTGACATGCTGAGCCGTTGGAATGCGGGACGCATTCGGGTCTTACTTTTGACGCT  
 GCGTCTGCTGGTCACGGCTTGAATTTCCAGCACGGCGGGCATCGCTTGGTGTGGTACAAC  
 CTGCCCCGATAATAACGAGCATTATATGCAAGCGAATGCTCGTCTACATCGCATTGGTCAA  
 AAGAATCCCGTGACCATTACCGCATTATTACCGCTGATACTTATGATGCGAATATGCCG  
 GCGATTCTGGCCGGTAAAGCAAATAGACAGCAACGCTCATCGACGCCGTGCGCCGTGAT  
 CCAGTC

>RXA01031-downstream  
 TAAGACCGGCACGATCGCACCGT

>RXA01032-upstream  
 AGCTAATCAGCACCACCTACAACACCACAAACACACCCCAATCAGCATGATCGTGCCGGT  
 TGGGGTGTGCTTATCCCCTAAGAAAGTGACACCTTTACC

>RXA01032  
 ATGTCAGACCACGACGCCCCACAAACACCGATCCCCAAGGGGTTTTGGCAGCAGATCGAC

CACCAACTCGATCGCCTCGGCACGCAGCGCCAGAGACCTTCGCAGCACTGCGTGACATT  
TTGCTTGATCCTGCCTACACCGCCATTGTTCATGACCGTAATCGCTACGGCGTTGTCACC  
TTTGACACCAACTCAGCCTTCTTCTCAGGCTCTGGCGGAGACAACGGCTTAGCCGACGTA  
CTCATTAACTGTGATTGGCGCATGACTGACTACCGCGCCGAGTACTACTACGTCATGACA  
CATAAATACACCAAGGAATCGTTTACCTATATCGAGGGCGACGTGAAACGCGGCGACCTC  
ATCCCGCCTAATAAT

>RXA01032-downstream  
TAAGGACAACCGCCATGACTCAG

>RXA01033-upstream  
ACGTCATGACACATAAAATACACCAAGGAATCGTTTACCTATATCGAGGGCGACGTGAAAC  
GCGGCGACCTCATCCCGCCTAATAATTAAGGACAACCGCC

>RXA01033  
ATGACTCAGATCGCCATGTATCTCGCAGGACCCATGACAGGTATCCCTGAATACAACCTAC  
CCCACCTTCCATGCAGCGGCTAATAAGTTCCGTGCAGCTGGCTACACCGTACTCTCCCCC  
GCTGAAGACGAATATGAATCCCAGCTCACTGCACCATTTGCTGAGAACGCTGAGCACAAA  
TACGACCACTACTTGCCTCTCGGTATCGAAAAGCTGCTCAAGGCTGATGCTGTCCACATG  
CTTCAGGGATGGCAGAGTAGCGCCGGTGCCACTCTTGAGCACGATATTGCACAGAAATTG  
AGGCTTGCCATTACCTATGAAGAACCACCAGCATCC

>RXA01033-downstream  
TAAGGCGCCTCCGGCATAGCGTA

>RXA01034-upstream  
AGAAAGTATGTCAATAACTTTGACATAACCTAAACACAATAAATTATGTAGTATTATGTG  
ACACTAAGTTATTACATTTATTACATGATTGGTTAGGACT

>RXA01034  
ATGGACATGGCCATTATTTCAGTCGGTCTGAATACACATCTGATGTCTCACATGAGCGCATC  
ACCAATGTCTGCTCTGTAGGCGTGGTCTACGAGGGTAAACAGTATGTAGTGGACCTTAAT  
GGTGACGACATTGATACTGAGCTCGATATGATCACGCTCAAAGAAGTCATCAAGATTGGT  
CGTGAGGAATCTGCACGCCAGATCCGTCTGGATCTGTAGATGCAGAGCTGCACCGTAAG  
GCGCGTTTGTGGGCTATTGACAATGACATGGCCGTTGGTCAACGTGGTATCGTGCCACAG  
GAAATCATCGACCGGTACAAAGAGTACTGCGAAAAAGAAGGCATTCCTTTTCGAA

>RXA01034-downstream  
TAAGAGCCCTGTGGAGAATTGTT

>RXA01035-upstream  
GGCAGTGATGCACCGCACTTGAGAAAAATAAATCATCTCAAGAAACAACTAATACGTTA  
TTATTGTAATTTAATTAGAGAAAAGAAAGTGACTTTTAAA

>RXA01035  
GTGCTTATTCGCATCGCCGAGCATCAAGGCCGGCTCCATGTCCATAGCCCCCTACTCAAAG  
GCTTTTGCCGCCCCGCGCTCGAAAGCTCAACGGTCTCTGGTCACCCGAAACGAAGACCTGG  
CATTTACGCCCCGATAAAGAACAACCGGTGAGACGCGCACTCAAGGATGTCTACGGCTGG  
GATGAATTCACCACACCCGAGCTATGCACGGTGCAGCTCACTGTGACCCAGAGGCAGTG  
CTCAACAAACACACACTCACCATCGCTGGTGTACACTTCTGAGCCGTTTACGCAGAAAT  
TACTCGGTGTGGTTGGGTGATAATGTCCGCATCATCAGTGGCAATTTCCAGAAGCAGCA  
GGATCACCCCACTACCCCTCATCATGGGTGTGAAGGCTCAACCCGTTGTTATCCATGTG  
CAGGAATTTCCCTGTAGATGCTGTTTCGACTATTCCCCCGCGATTTAATCCTATTGTTATC  
ACTGCACCGCCGAGCATTGATATTGCTGCTCTTCGAGCTGAACGCGAACAGCTCACCCGA  
CGCATCAGCGAAATTGACAAGAAAATCGCACGTGCTGTGCATCCAACCATTACAGACTGAG  
GCTGCC

>RXA01035-downstream

TAATAATGATGCAGACTCTCAAG

>RXA01036-upstream

CTGAGGCTGCCTAATAATGATGCAGACTCTCAAGCGGAAAATTCCGCTCATCTCATGCAA  
TGACCTCAAAGAAGTGCAGTTACTTTTTCTTAAAGGTCAG

>RXA01036

ATGCACACAGTCGGCTACAAGCTAGATACCGATCTTCGCAAGCTCACTAATACCGATGTG  
CTTGATCTTATTAACGCGCTCTTCGGCACCCTGTGACCAGCGCAGATGACGAAGCAGCA  
GATTTTCATTGACTCTGATCCTCAGTTTGCAGTGCTCGTTGAGCTGGCCTACCACGACTGT  
GCACGCCGCGCTGCCATGGGTCTATCCAGGGTACAGCAGCTCATCTATGACAATGCGGCT  
AAATCAACCTACTACCGCAGCGTCGCAGCTAGACATCGCAAACACATCCGTGAATCCAC  
GAGCAAACACAGCGAGATGGTATTCACTTCGACAACCCGTTGTCTCGTGACGTCATCAAC  
GATCTCAGCATGTCCATGAACCGTGCTCGACTAAACCGCATCGCTTCATGGAAATCAGCC  
GGCGTACAGCGCTATCTCAACCCCACTATCTCT

>RXA01036-downstream

TAGAACCACACACAACCAAGAAA

>RXA01037-upstream

CGACTAAACCGCATCGCTTCATGGAAATCAGCCGGCGTACAGCGCTATCTCAACCCCACT  
ATCTCTTAGAACCACACACAACCAAGAAAGCAGTCACTAC

>RXA01037

ATGACCACCTCATCACCCCTTAAGTCCAAAAATTCCTTAACGGCGCGCAGACCACATTT  
GTCCGCAATTGTGTTGCAGACGGCCCAACCGAGGTAAAAGCCACCATTGATGCACGTGGC  
GGTATCGAACAGCTCCGTGACAATGAGATTTACAGCTCCCCGACAAGCTGTGGTTCAAT  
AGCGCAACCTCCGCATCCAATGACGAGTTACACCGGATAACATCCGACTTGGGTGCTC  
TACAACATGGCACTGAATAAGGCATCGGCTCATCGCTATGAGCTTGCTGCCCGCTGGTAC  
GCCATTGTTAGCCCTCAGCCATCGCAAGAAGCTAGCCACAAGCGCATCGCGTCTGGCAC  
CTTACCCAGCTGCACGCACTGGTGACCCTATCTCGCACCTAGGGGTCATCATTCCTGGT  
GATGAGATCGACGCTCTAGCGCAGTCTATGGAGAATGCTCGTCAAGTTGGCACCGAGAAT  
TGGTCCACTGTCAACCATGCGCACCTACGTGACCAACCGCAAGGCATCC

>RXA01037-downstream

TAATGACTCGCGATATTTTCCAC

>RXA01038-upstream

ACGCTCTAGCGCAGTCTATGGAGAATGCTCGTCAAGTTGGCACCGAGAATTGGTCCACTG  
TCACCATGCGCACCTACGTGACCAACCGCAAGGCATCCTA

>RXA01038

ATGACTCGCGATATTTTCCACGAGGCTGCAAACTCATCGCACACCTGGGGTGGAGGGAC  
GCTTTTCCAGCACTACAGCGCACTGACCCAGCGCCAACACATGCTGTGCCGATCAGGGCC  
TTTGATCTCAAGGCGGGCGCCGTCATCACCGATGAAAAATCGAAGCAATGCTTATATCTAT  
GACACCCCTGTTCATCACGAGCCATATAAGCACGAGTTACCTCATCAAAACACCCACCCT  
TTTGAGTGGGCCCCTGGAACAAATTGCCACGCTTGATCCGGCGTTCTCGATCAAGCTCGAT  
CGCTCAGTGACCGTCCCCTGAAATTTGGACTCTACGCCCGCACACTGCATGACCTTAATACT  
CGGCATCAAGACTTCTTGGCACAGCGCAACGCCATGTTGCTTGTGTTGCCCGTCGTGGT  
GTTGATCCAAAAAATATCGCAGACGTAATTTGGTTTAAACCACCAATCAGATACATCGGATT  
CTCAGTGCTACTCCGGCTGATTCCCCTACTGATTTAGGCGTTAACCCCGCCACAACAATG  
GGTGATGTAGTGAGGTTTATCAAGAAACGTCGCACCACTATGCAACTACGCGGCACCGCT  
GTCCGTGCACGTCTATCACGGCCTTACGCCGGCAGTCATCTCCCGACTAAGCGGCATG  
TCGCGTGCGGGTGTCTCAACGCAGCCAAGGCATTTCCCAACCACCATCAACCACAAGGTC  
AAGAAAAGAAAGCAGCACTTCCATGTC

>RXA01038-downstream

TAATCTCGGCACATACTATGCAG

>RXA01039-upstream

AAACCTATATGTTAATAGTAACAGAAATTAATAAGATACTAGAGTTTAATTTGTAGTATC  
CAGGGAACATTAAACGGGTAAAGGTAAAGGACAAACGAAC

>RXA01039

ATGGCGATTAAAGGCGCAATGCCGAAAAATCGAGTACCAGGTGTGGCAGCAGGTGCGTTT  
ATTGCTGCTGCCGTTATTGTCAGGTGGATCAGGCGTGACCTTTCTCGCCCAAGGCGGTGGT  
GATGTCAATACAGTGGCCGTCGTCGAGCCACAGGACGAGGTAAAAAATCAGGTGCTGACA  
GAAACCGAAATTGTCACGAAGGTTACGATCCTTCTTCATCTGACGCCAGTGATGCTGAC  
AGCAACACAGGCACCGCCGAAGGCGCAGACTCAGATCACAAAGAACCCCGTGAGCACGAC  
AGTGCTCAAGAGCCAACGGCTCCGACCGACCCACCTTGACCATTACCGGCAACGGTGAC  
ACACCAGTATCAGCACTTGATGCTGTCGAGGACCTGCCCGTCCAGGTACGGTGACGTC  
ATTGAGAATGGCGAAACCTTGTCCTCTATTTCTCAGGACAGTGGTGTGCCGGTTGGGTTG  
ATCATTGATCGCAACAAGCTTGTTGATCCAGACCTGATCTATGCAGGCACGCCATTGGCG  
ATTCCGACTGAGCAGGAACCTTGCTGCTGCGATACAG

>RXA01039-downstream

TAATGTAGTGGTAGAGGGTTAAA

>RXA01040-upstream

TAATTTCTGTTACTATTAAACATATAGGTTTTTTTAAAGTTTCGTCTACATAAACCTGCAAC  
AGAAATCACTACACCCAGTTCTCGAAAGGCTTTTTTCTCTC

>RXA01040

ATGACCTACCCAGTTACCCCTCAACCTGTGCAGCCAGCACCAGTCGCCGAAAAGATCAAG  
GCATCAAGCCTCAAAGAAGGCACCTCAGGTATTTATCAAAGGTCGGGTAAATTACTCCCGC  
ATCGCAAGCTTTATTACTGGTACCGAGCGCGAAAACCGTAATCGCGACAGGCTTCACCCA  
ATCGAATTGCACTACACCTCCCTGACTTTGAGCCACCCTGAAATCATCTACGGCAACCCG  
CAACAAAAGACCAATGAAGAACTCTTCCTTGAGCAGCGAATCTTTGTCGGCAAGAAGCGT  
CCTGAAGAGGGTCCAAAATTCCTCCATTGACAACAAGAGCAACCGTCTACCACAGGTTTGG  
GTGCCATCCACCAATGCTGATGGTACTTATGAGCAGCTTGAAGGTCTCGAAGGTGAGCTC  
GACGCAGGGCTCAACGTCATTATTTCTCATCGAGTTCTATAAGCCACGTACACAGGTTAAT  
CGCGGCTCCCGCCTCAACGCGCTGTTCTGTCAGGAGCCATTGTTACTACACCCCTGGT  
TACAATGCAGATAAGCTCGCTGCCCTCGGAATCGTACTTAACGCACCGCCAAAGGACACT  
ATTCAGCTCGTTTCTTAATGAGGTGCTGTCAGGACAAGACCAGTCCACCACCGATGCATCC  
GGTCTCCCGCTTCCAGGCCAGGGATATAGCGCACCTGATCAGCCATATCAGGCGCAGCCT  
CAGTATCAGCAGGCAACCCAGCGGCTGCACCTCAGCAGTACCAGGCCCCACAGCCCCAG  
TACCAGCAGTCAGCTCCACAGGCACAACCTGCACCGGCACCAAGTTGCGCAGTTCCAGCAG  
GCAAGCGCCTCAGGCACCTGCTCAGCCAGCACAGCAGCAGTATCAGGCACCACTTCCTGCG  
CGG

>RXA01040-downstream

TAATCCTCTTGCAGCAGGTCAGC

>RXA01041-upstream

ACAGCAGGCAATGCCTACCCAAGCCCCACAAACACCGGCACAACCAGTTTCAGCCACCAGC  
ACCACAAGCCGGTTCTGCATTTACCGATGCTCCGGGTGCT

>RXA01041

GTGCCACAGGCACCAGCAGTTTCAGGCTGCTCCCGCTGTAGCTCAGGCGCCTGTGCGGCCA  
GTAGTTGATATGACCGAGCCAGCATCCCCATGGGATCTTCCAGCTGCACCTAGTCAGCCA  
GCGCAGCCAGCTCAGGGCATCACCTACCCGGCA

>RXA01041-downstream

TAACAACCAGCACAAACCTTAGA

>RXA01042-upstream

TTTTTTCACCAAGGTCGAGGCGCGGTCTGTGTGCCACCTCGACCCACTTTTCGCCCACC  
ACTTTTCGTCAACCTACCAACAACAAAGCCCAGGTCACTT

>RXA01042

ATGGTCAACCCCTTTTCACACGCTTGATAACTCACCGTTTGATCCGGTGGCACAGTTTCCT  
GCGTTTATCACAACCCGCTTATCAATCACTTGGGCGCGCGTTCGCGCCTGGACAATCTCA  
GACATCAACAAACGCCCCATCAATGTCCAACAGATGCTGACCACGGCCACCTACGGTAGC  
CCCGTTATTCATGGTGCCCGCATTGAAGACGCAGCAACCTCCCTACTTACCCTGGATGAA  
CTGCGTACACAGATTCCCACCGCTGCCAACAATGCGTTTTATCTCGATGCTGTCCAAGAT  
GGCTGTCTTATTTTAGATATTGAAAAAACCTGTCCCCCGAGGTGCGAGCCACACTACTC  
ACGCTCTCCCCACCGCCTTTTACACAGAGGTGTCCATGAGTGGTGTGGCTATCACCTC  
GTTATGCCGATACCAGAGAATTTTGCAGCGTTTCTGCGGTACACAACAAACCCAGTATC  
AAACACCCCCAAGCGCTGGTTGCAAAATCTTACCTCACAGTGGATCACCTTCACCCGACAA  
CCAATCCCAGAGCATGTTCTCCATCACAGTGAATCTGCTAACACAAGTGTGTGCCATGG  
TTGAATGATCAACCACTTACATGGGAAAACGCTCTTGCAGACTTAGCTAAAACTGTTGCA  
CCCAACTTAAAAACCGGTGCCGGACTTACCATCACACCCAATGCACTGATGCCACCAGAT  
CTCAGCGATGCTGAGCGCATTCGCGACGATGAAGTCATCGACTCGACCTGTGATTATTT  
GCCGAACATTACTCGAAAAACACTTGCAGACTTCTATGATGATGCATCCCGGTTCGAGTTC  
AGCCAAATTGGTGTCAATTATCAATCTACTGCTCCCCACTATGAGGATGCATCCCACCACG  
ATCAGTCTCGACAAACCCATCAACTCCGATCACATCATCAGACTTCTGTTTCGCTGTGCGT  
ACTCGCGTGATCACTCACCGCAGCAAAATGATGAGGAGCGATCTGGCGTTCCGTATCTG  
ATGTATCAGGTTATTTCTGCTTGACATGCGAGAACACCCCGACAATGGCGACTACCGT  
GTCGTACCCTCCCGGCATAATAGAGACCAACACAGCAACAACCCCTCAGCTCATGTGGTC  
CACCAACAACCACAACCCAGCCAGCGCAGCAGATTGCCCACATCACTACCGTGCACATA  
CCCCAAGAAAACACGGTGTCCGAACACAGTTTTTAAATCTATAACCCACCAGCCACACCC  
CCTCTAGGAGGTGAAAAT

>RXA01042-downstream

TAGATTTATTATTAAACACTTG

>RXA01043-upstream

TACTAGGTATAGCAACGGATTAAATAATCACTATAATTAATTCTTTCCGTACTCATTTTA  
ATCACTACCTATTCAACCACTTGAACGGAGCGTTTTTCGCC

>RXA01043

ATGTTGAAATTCCGCATCATCTCCACAGTCACTACTGGATCTCAGCCAACTCCACGAAAA  
AGCTGGAGCCACCCCGACACCACTCTCCTGGTCAACATGGTCACTGCACCATCGCTGTGC  
TCAGCCATCAACGTGTGGAACGCAACTGAGCGTATTCCCGCTCAAAAAATCCTTAATGTC  
GAAGAAGTACACGTTCTTGGTGAGTGCAGCGACGCCATCATCTCTACGTCACTAACCAAA  
AAGGACAATCCGCACGCACTTGTGCCCCGATGATTTGACCAAAATCGGCGATGTGTTTGGC  
TATGCGCAAGACAATGTAGCTGTTTTTGTATGTCATTGTCGAGCACTGGGCGGTGTGTT  
TATGGCCTGTCTACCCGGACTGGTCATGCACCACTGATGAGCACACCGTTGCACTTGTG  
TTTGATACTGATTCCCCTACTGGGACGCATATCCTCGGTGAGCGCTGCGTGTACTCCGAC  
ATCATTACATGACTGACGATAAGTCTGCCCCGTGGCTGGGGTGCAGTCATTGCCATAGCA  
CGAGCCATCATCTCAAAGTCGAACAGATCATG

>RXA01043-downstream

TAGTACCCCAACCATGACTCACTT

>RXA01044-upstream

CAGATAGCCACTACCTACACGCATCTGTTGTGCTGAAACAACAGCGCGACACTCACTCTT  
CTCATTACTCAACAACCTTACTTTTAAGGACTACATAACTT

>RXA01044

ATGTCTCTCTACCTTGACGACACTTTGTCTCGCATCGTTGAACTTGATCTCAAAGACACC  
CGCATTGTGCCGTTTCTTGTGTTGAACAGGTATCGGTAAAACCTCATTCATCTACGGC  
ATCGGCGAACGTGCAGGCTACAAAGTCTTCAGTATCTCGGTAAACACCCTTGCCGATAAG  
GGTGACCTCACGGGCGCTCGCACCTGACAGACCTGCCGATGGCAAGTGGAAGCAGATG

TTTTTCCCGCACGCGACCTTCGTCTGAAGCAAATGACTATGCACTAGCAAACCCAAACGAA  
ACGGTCGTCAATTCTTCTCGATGAGATTAACCGAACTGATTCGGATGTCACCTCTGCCTCG  
ATGACTATCTCTACTGAGCGTCGCGTTGGTACCACCGATCTAGCACCCAATGTCCGCCTT  
GCTGTCAACGGAAACCTCACCGGTAATGTACCCACCTTGATTACAGCATCTCTGACCAGG  
TTCTCCCTCTATGAGGTCAAGCCATCCGCAGAGACCTTCATGAACATCATGGGCGGCCGC  
CTCAACAAGTACATCCGTACCGTGCTGACCAAATACCCGGAATACATCTTCATGAAGCCA  
ACTACTGCTACTGCTCTTATTACCCTGGCGATGATGATGACGACCATAACAACCAATGCG  
AAGCAAATGATGGACTTCAACGCTGTGCTCGGTTACAGACCAAGACATGGTTCAATTTACC  
GCACCTAGAACTATCGAAGGTTTGTCCGTCTGGCTCAACAACGCCGATGATGACTTTCTT  
CGTCTACTTCTACAAGAAAAGGTGGATGGTCTTGCTCGATCCATGAGCTTGCTGCAGGCT  
ACGCTCGAATCTCACACCGGCGATACCGCTTTTACCGCAGAAGTCTCAGCGAAATGACC  
AATGATCTGCTGAGCTCCGCATCGCAAGCTCCTAGTGGTCCAATCAAACCATTGTGTCTAC  
GACCGACTCGCTGCTGCACCAAGCAATACTGTACTGGAACAAGAGGTTACACACTCAGT  
CTCAATGACCGCGCCGATGCTTGTGTGTTGCCCCTCCATGACACTGTAAACAACGCTGCA  
CCAAGCATCATCGCTCACCTTGATCTGAAGGCGTACTTGATGAAGTGCCTCAAAGACAGA  
ATCAGCAAAATTGTTTCACTCGGTCTGTACCAACGGCAAACTATCACGCCTTGACCAGA  
CAGGATACAACGTTGACTCGAAATCTCGGTCCCGCTGTCTTGGGCTTCTTGGAAGT

>RXA01044-downstream  
TAAAGCAATTTCTTAAGTACCTT

>RXA01045-upstream  
CAGCTGAGGTAGTCATCTGTCTACCTGCGTGAGTAGACACTAAATCCTGTCCACGCACC  
CTTACCCTTCTTGACACTAGTAATTGAAAGCGATCCCCCTC

>RXA01045  
ATGGTTACCTTCAGCGTCGCAAATCACGCGCCTCATACTTTTAGCCCATTCGATATTGAA  
CCACCACTCACCGGTAACGCCACCACCGACGAACATGGTTACGAACACACCTCAGTGCTA  
GAAAAACTAGCCTCCAACCACCTGTTCAATCCAATCAATCCGCAACACCCAGTCACTATC  
ACAGCCACCGAAAAACGGATCAACCGTTGATCTTGATGCAGCAGCACTAGCACAAATCTT  
GCTCTAGCGATTACCCAGACTCAATGCTGGCAAATCATCAAGGCTACAACCGTGACATG  
ATGGGTCTACTTTCGAGCTTACTAACCATTGTTGGCTTTGATCGCCGATTCAATTGTTGAC  
CAACTCTTTATCTCCCAAGTGTCAAAGCGAATCGTCTACAGCACCGGCAACAACGTT  
ATTTACACCGTGCCCAATGACGTTATCCCATCTGCTAAAGACATCTTGTCCACCACTGCA  
AAAATGAACAATCCACTGACAGTTACTGCAAGTGCCCCAATTACTGTTGACGACATTCAC  
ACAGCCTATGAGGTATTTTTTCGCTTCTCTTGCCCTCAGTGTTTTTCCCTTATACCTACGGT  
GCGGTATTCCTTAACAACGCAGAAATTCGTTGAGTTTGTGATTACCTTATTAACGAAGCA  
ACAACACTGCACCTCGGCATCACTCATCTCCAACAACACCTTTAATAGGTTCCAATCAATG  
CGTAACATCTCCATTGATAATCTCACCGCCGAGTTTCTCTTACGCAAAAATGAAGCAGAG  
ACAACATGATGATTATTCATTTCCCCCGGTACTTGTTCCCTGCTGCATTCTTGGGTGAAA  
CTCAATCAGCATGATGCTCGTGCTAACAATGATGCACCCACCTGTGCACTAGCACCGTTT  
AGTGTGGCTCAATGGATCATGCCGGAGACCATTTGTGTTTATTAATGCTGAAGCTCATGCT  
CATGCATCCTCCCAGGACATTGAGAAGAAATGGAAGGAAATTAATGCGGCGTTAACAGGG  
TCTATTCGTATTATGTCGCCAAATGCAATTTCCAAGCTGCAATCTGCTCAGCATCTCGGG  
ATGCAAGCACAAATGCAGGCCATGCGTGCTCGAAAAGATCACCACAACATGCAGAAGCGT  
TCCTCACAAGAAAACGACTTTTCCAAGGCACTCCCCCACCACAGACTATCGTGCTTTCT  
GTGCGAGAGGTTCTGCGCAAACCTCACTCACGTACGCCAATCGCACAAACCTCAGAAATAC  
CAGAAGAAGTCTCTGACCAGAGCTTCTCGCCGACACCCGGATAACCTAATGTCCCTGGC  
ACCATTAAGAGCAAGCTCTTCTACCCTGACCTGCATGTTTATGTAGATACTTCTGGTTTCG  
ATTAGTGAAGAAAGCTACCGCAACTCTGTGGTTCTGCTCATGCAGCTTGCCACCAAACTG  
GACATCAACCTCTATTTCTCCACCTTCTCTCACGTGCTCTCCGAAGAAGTACTATTGCCG  
ACCAAGGGTAAAACACCACAGCAATTGGCAGCTCTTATTTTCGGCCATCCCAAAGGTCTCT  
GGCGGTACTGACTATCACAGATTTGGGATTACATCCAGATCAATCCGCAGCGCCAAGAA  
CGCATGAATCTTGTGTTAACTGACTTCGGATTTCATGCCGAATCGCGGCTTAAACATCGAC  
CACCAAGTTCTATTTTCTACGTCCCAATCCTGCCTGACTACGGCAGCTGGTCAATGGTT  
CGAAGAGATATGTCTCATTTTCGCAAAATGAAATGGTTGACTTCGACCCCTATATCCACAGC  
CGACTACTCGGCGTACACGAAAA

>RXA01045-downstream  
TAGCAGCTGATCCATCTAGGGTC

>RXA01046-upstream

TAGCGATCCTAGGCAAAATGCACCAGCTAACCCACCGCTCAACCGCCATCTGCCCCAC  
CTCACACTCATCACAGCAGGGTCTCCCTCCGGGCGCCATT

>RXA01046

ATGATCCCTTTTCCAGGGCAACCGCAGCAGCAAAGCGCACCCAATGACGAGACCCGTTTC  
ATCGACCTTAACGAACGTCATAAAGATGATGAACCAGCCCTGTTTCGCGATGATGTTATT  
GATCAAACCTCTCGCTATTTTGATCAGTAAAAATAAGCCCAATGCGCTACTCGTTGGGCCT  
GCCGGTACAGGTAAATCCCGTATCGCAGAAGATATTGCGCGCCGCTTGCCAATGATGAC  
GTATCTATTCCCGATCAGCTTGTCGGCCACCGTATTCTTGATGTCTCCATTGCAGAGCTT  
GTTGCTGGTGCTGGCGTTGTTGGTCAGCTCAAGAAACGCATTCTGGATCTCATCAAGTAT  
GCGACCGACCCGAGTAACAAAGTCATTATCTTTATTGACGAGATTACCAAATTGCTGGT  
GATCAGTCCAGTCACAGTGGATCGCAAGCCAAAGTTGCTCAGATTCTCAAACCTATCTT  
GCCCCGTGGTGACCTTCGTGTTATTGGTGCCACCACCACCCAGGAAGCTCGTGACTTCGAT  
CATGATCCAGCCCTCAAACGCCGTTTGTAGCAGAGTAAATGTGCGATGAATTTGATCGAGAT  
CAAACGCTCACTATTCTTCATGCTGCACGTGATGGTTACCTCAAACATTTCAACAACGCT  
GTCACGGTACTGACGACGTAACAAAGTCATTATCTTTATTGACGAGATTACCAAATTGCTGGT  
GGCAATACAGACACAACCTGATGCAGCACTGACGCTGTTTGATAAGGCGTTGGCTTCCCTA  
ACTATGGAGAAACAGCGTCTGATCAACAACCATGTCATTGCGCCGTCGCTCAAGTTCCCT  
GTGTCAAGAAAGGCACATCCATAACACCGCTCGCAAACCTTGCTTTGGCTCTCAAGTGCCA  
GCCTCCATCAATACTGATGATGCTCGTGACAACTCGAAACGTTGTTGGTCAAGATCAT  
ATTATTGAGCCAGTACTCACCGCTATCAAGCGTGAACAGCTTGGTATTTTCCCTCGCACC  
AAACCATTGAGCTGGGTGTTTGCTGGTTTCATCTGGTGTGGGTAAAACAGAAATGGCGCGT  
ATTCTCTCTCGCGCCATTAATGGCGGCGATCCCATCATTATCAATGGTCCCGAATACATT  
AGTCCTGAGTCCATTACTGGCCTTATCGGATCATCCGATGGCTATATCGGCTCTAATTCT  
AAGCGTGCTAAACCACTCGACCCGCTGATTTCTAATCCGCGTCAGGTGATTGTGCTCGAT  
GAATTTGAGAAGTCTCACCCCTCATTTCCAGCAATTGTTTCATGGCAGCTCTTGATACAGGC  
ACTATGGCGATGGCTAATGGCACGACATTGAATTTCTCTCAGGCCATTATCATTGCCACC  
ACCAATGCAGCCCGCGACAAAATCGGTGCTGACAGCTTTGGATTCGATTACAGATAATTCA  
GGTGTCTCTCGGTTCTGCTCAAGCAGCAACTGATCCGCGTGACAGGAACGCCTCAAGTCA  
CTGATGTCCAAGGATTTCTGTGAACTGCTCAACCGTTTCCAGAAATATCTTTGCCTTCA  
ACCGCATTGATGCAGGCACCTACCGTGAGATTCTGGACAATCTCTACCAGCGTCGCCGCTG  
ACGCCGTGCTGCTTAGCCACCCCGCATACGCAGCACAGATCCCTGCAGATATTGATTCA  
GACACTCTTGATCAGCTGGTGGAACACCTTTATCTCAGATTTTGGTGCACGTCCTGCT  
GCACGCACCATCGAAGACCACATCGCATCCTTGCTGATG

>RXA01046-downstream

TGACCAACCTTTTAGGAGTACAT

>RXA01047-upstream

AACCACCTTTATCTCAGATTTTGGTGCACGTCCTGCTGCACGCACCATCGAAGACCACAT  
CGCATCCTTGCTGATGTGACCAACCTTTTAGGAGTACATC

>RXA01047

ATGATTGATACCACTGCTAACAGCACCTCAGGCACCCCTACCTACACTCACTGCTGACCAA  
GCTGCGTTTATCACCGGTTTTTGGGAGGCTGCTATCTTCACAGCCACCGTCACAATAGAT  
AACGAACCTATATTTCTTGATGAAGCGTTCTTCTTAGGTCAAGAAACCTATACCGACATT  
CTCATGAATCAACTCCGCACCAATGAAGCCATTGTTAAAGACTGTCTCGACTTCTTCCTT  
GACAACTACACCACAATGAACAAGCTCATTGTTGATGGTCTATGCCAGATTGGGAGCAC  
CACGGCCATGATTTCTTACTACCCGTCACCATCATGGTGCCGATTCTGGGATCGTGGC  
TACGACGAATACGGTGCCCAACTACCGACAATGCCGAAAAATATTAGAAAACGTCTC  
AATTTCTGGATTGAGCCTGATAGTGACCCCTCTCATTTATCAACTTCGAGTACCAC

>RXA01047-downstream

TAACACCCCTTGACCTTATTTTT

>RXA01058-upstream



CTCCCGTAATAGGGGTAATTTTGCAATTAAGTACGCTTAAAGTAAGAAACATTGCTAATC  
TTTATCTGGGTAATTAACAATCGATTTTAAGGATATTCTC

>RXA01058

ATGCGTAAACTTCGTACTGCTTCCGTTGCACTGCTGACCGCAGGTGCACTTGCACTGACC  
GCTACTCCTGCAATGGCTCAGTCCACCACCGGTTCTTCTGCATCTTCTCAGGTTGGCGAC  
GCACTCGGTGCTAGCGACTACGAGCGCGACATCTGGGGTTCTCTAAGGACTTCGACGAT  
GTAACCCCATTCGGTTCCGCTTGGTACGGCTACACCCTGGCCGCAACCGCAGTTGCTATC  
TCCGGTCTTGTGTACGAAACCTTCCTGCAATCGAGCAGGCTGCTGCACAGGCCCGGCATC  
AAGCTGGAGATCCCACGCTAC

>RXA01058-downstream

TAATTGCCACTGCAATCTTAAAT

>RXA01062-upstream

ACAACACGACAGTTGTAAGTAGTGGTTTCAACACCATTATCGGTATGACTCGTGGCGACT  
CGTATCTCTCTGATGATCTCGATGACCTGGGTTAAACCCG

>RXA01062

ATGAACGAGCAGGAACGAGAAGCCTTAGAGGATGCTGCCCTTGAGGAAGCTGCCTTAGCC  
GATGAATTAGCTGCATTAGAGGCTGAAGCTGGCGTACAAGGGTCAGTCGAGCCTTATGAC  
TATGCAGCAGACCTTGATGATGAGGACGAGTTTATGAGGACCCCTTTGCTCAGGATGAA  
CCCCGTGACGCTGGTCCGCTAGGTGAGTTGAGCAGTGATAACCATGTCTCTGAGGCTGTT  
GCTGAAGACACTGGGACAAGTACAGAAGAGTCTGCACAAGAGGGGCAGTCACGAAGAGTCG  
GTAGACAATCCCCGTGATTTACCCGGCACTGCGACAGCGGTGCGATCTTTTCGACCCAGA  
CTTCCCGTACCCAATGCACTGCGACAGGACCACCCATCCGAACACAACCGGCAGTGAAC  
ACCGACATATATGATGGCGGGCAAGAGAATACAGCTGGCGCGACTGCCGCAGATGTGGGG  
GCGGGA

>RXA01063-upstream

ACTTTCTTGTAGAGGTCTGGGTAGTGGATAAGTTAATCAACTATGAAATAGACTAACTTA  
ATCATTAACATTAATGGATTTTCGGAGAATAGGGATAGAC

>RXA01063

ATGGCAGACGAGAAAAAGGTTTCATGTACGTGCCACACTGCGCTTTGATTCAGACACCCAC  
CAGCGGGCAATTTATTTGGGCAGATCGAAAAGGTATCTCGCTGAGCGCGTATGCAGAAGAG  
GCGATCAGAGAGAAGATTGATCGTGATAACGGTGTGCACGTTATCCGAATTCAGTGTG  
GATAACCGCATGAACCAAATCATTTGATCAGCTCAGCTCGTTTGGTCTGAGTTGGCGAAC  
AACACGACAGTTGTAAGTAGTGGTTTCAACACCATTATCGGTATGACTCGTGGCGACTCG  
TATCTCTCTGATGATCTCGATGACCTGGGT

>RXA01063-downstream

TAAACCCGATGAACGAGCAGGAA

>RXA01066-upstream

AAACGTATTCCTTGACCTGCGCATCAAGGTGCTGAAGAACTGGCAATCCGATCCAAAGGC  
TTTGAACCGCCTGGGCTTCTAGCTTTAAGGGGGTGAGTTC

>RXA01066

ATGCGTAGGGACAGTTTTCGGGACCGCGCTAGTAGTCAAAACTTATGATTTTGGCGAA  
GCCGACCGCATTTATTTGTGCTGCTACCCGAGACCACGGCATCGTGCGCGGAGTTGCCAAA  
GGAGTACGCCGATCCAAATCCCGGTTTGGGTCAAGGCTGCAGCTTTTGTGGAACCTCGAC  
GTGCAGCTCTACCCAGGTAGAAAACCTGTCCACCATCTCTGGCGCGGACACCGTCCGGCTAC  
TACGCATCAGGCATCATCGAGGACTTCACTCGGTATTCCTGTGCGTCCGCCATCCTGGAA  
ATCGCCACCCACATCGCAGGACTGGAAAACGATCCGCACCTGTTTGAAGAAACACCCCGG  
GCGTTGAAAAACATTACAGGACTCCCCAGAACCCATCCTCAACCTAGACGAGTTCATGCTC  
CGCGCCATGAACCACGCCGGCTGGGCACCAAGCCTTTTCGACTGCGCAGCCTGCGGCCGA  
CCAGGACCTCACACGCATTCCACCCAGGCGTCCGGCGGGCAGTGTGCCTGTACTGCCGA

CCGCCGGGAAGCGCCGAAGTCCCACCAGAAGCACTACACATGATGTGGTTGGTCGCCAAC  
GGCCAAAGCAGCCCGCATTCCCCGGGAACACCCAGAGCAGCAAACCACCATTACCAACTG  
ACAACCGCGCATCTGCAGTGGCATATTGAAAGAAAGCTGCCACGCTGGCGGTGCTGGAT  
CAGGCC

>RXA01066-downstream  
TAGTGCTTAGGCTTAGGCGTCCG

>RXA01068-upstream  
TGGTCTACCAAGACAAGCTGTTCCCTGATTTACGCAGCAAGATCTGTACGACGCGGTCC  
TGGAATACGCCAAGCGGGATCGCAGATTCCGGAAGCGCATA

>RXA01068  
ATGCCCACCAACCAGCCGACGCCAGCCCAAATCAAACGCTGGCGCGGATACCTGGCCAAT  
GAGCAAGCAGAGGCCGACGCTACCGCGACCTGGCCAAACGACGCGAAGGCGAAGAGCGA  
GACATCCTCCTAGCGCTCGCCGACGCTGAACACCGACACGCCGCTTACTGGGTGAAAAAG  
CTCGGCCCTGATGCCGAAAACCCACCAAAAGCCGACGTCAAACCCCGCCTGCTCGGTTTT  
CTAGCACGCCGATTCCGGTCCGTGTTTACCCCTGGCACTCATGCAGTCCGCCGAAACGCGC  
AGCCCCACGACGACGATGCCGACGCTCCCGCCAAATCAGCGCCGACGAACGCATCCAC  
GCCGAAGTCGTTTCGAGGCCATGCCAGCCGCGGAGAGAACGCATGAGCGGCAACTTCCGT  
GCCGCCGTATTCGGAATCAACGACGCGCTGGTCTCCAACGTCGCCCTCGTCATGGGTGTC  
ATGGCCACCGCGGTGCCCGCCCAAATTTGTTCTCATCACCGGCATTTCCGGTCTGCTCTCC  
GGCGCGCTATCCATGGCCGCGCGGAATACATCTCAGTGCCTCCCAAACAGAGCTTCTC  
GACGCTCCCTCCAGACCCCAAAGCCCGCGAAGCCCTCCACGCCCTCGACGTCGAATCC  
AACGAACCTGGAACCTCGTCTACCGAGCCCGCGGAATGAGCGAAGACGAAGCGCGGGCAAAA  
GCGTCACAAGTTTTTCAAAGAATCAGCGACCAAAAACGCATCAGCGACAACGTCCTCGGC  
AGCACCGAAATCCAAAGCGCGCGCTCCGCTCGTTTCGGCCGCCACATTCAGCTTCCTGTCC  
TTTGCCATCGGCGCATTCCTCCCGATCGTCCCATACGTCTTCGGCATGGAAGGCCTCGCC  
GGGCGAGTGGTGTCCCTAGTCCCTCGTCGGACTATCACTGATGGCAACGGCGCGGACCACC  
GGCTGTCTATCGGGAAGCCACCGGGAATCCGCGCGGTGCGTCAGCTGTTCGATCGGCTAC  
GGCGCGCGCTGGTCACCTACGTGCTCGGCCTCCTGTTTCGGCATGATCCTT

>RXA01068-downstream  
TAAAGCTCTTGCTTCTCGACGT

>RXA01069-upstream  
TCCTAAGCTCTCTTGAGTACCTGAGACCTTCTCAGCAAAACACAAAGTGCCTTCACCCAA  
CCTGGGGTGGAGGCACTTCTCATTTGCTAAGGTGTGCATC

>RXA01069  
GTGAACGATTTACCGAACCTACCAAAGCTGCCCTTCAACTGGACATGGGTGCTGGCAACT  
GTTGCCACGACAGTGGTGTGGCGGGTATTGGTTTGTATGTGTATTACCCGTCGTTGCCA  
GATCCTATGCCGGTGCATTGGAATGGATCCGGGGAGGCGGATAATTGGACGCCTAAATCG  
GTGGGTTTCGTTTCTTCACTGATTTTGTATAGGGCCAGGCATTATTTTGCTGACCCGTGTCG  
GGTATGCAGGCGTTGCTGACCATGCAGTCTGGAGTGATCACGCAACGCGGTGGGGCGAAA  
TCGGCGAATGAAGCGCACCGGCAGTGGGAAACCTACAAGGCAACAAGCATGCACATGGGT  
TGGTACATGTTTGTGCTCAACGCTTTGATTTTGGTGATGATCCTCAATGAGTTCCGCCCCA  
AACCCTCTGCCTGGTGGATTTATCATCGGGCTTATTGGAATTATTGCTGCCACGATTGTC  
CTGTTGGTTCTGATTGGAAAAACAACCACGAGTTTGGCAAAGAAATACCCCATGCCTGAC  
CAAGATGGAAAGACGTGGGGGATTTTCTACAACGATCCGGACGATAATCGGATCTTAGTG  
GAC

>RXA01071  
AACATTCTGTACGCGCTGCTTGCTCTGTCTGTCAATTGTTGCCATCATCGGCATCATCAAC  
ACCCTGGCACTGAATGTGATCGAGCGTCGCCAGGAGATCGGTATGCTCCGCGCAGTTGGC  
GTGAAGCGCGGACAGGTCCGCACCATGATCACCTTAGAATCTGTTTCAGATCGCCATCTAC  
GGTGTGTGATTGGTATCGCGATTGGTCTTGGTCTGGGCTGGGCCTTTGTGACAGTGATG  
TCAGGCGAAGGACTAGACGCTGCGGTTAGTATCCCGTGGGGTCAGGTCCGACTGATGCTT  
GTTGGTTCCGCTGTAGTCGGTGTATCGCCGCGCTGTGGCCGGCAGTCAAGGCATCTAGG

ACACCACCTTTGGATGCGATTACCGAC

>RXA01071-downstream  
TAGTTTTAGCGGCAGTTGAATCA

>RXA01074-upstream  
CGAATGAAATCACTGGGCGGGAGTTACCCCTCGGCGAGGAGCCTGAGCGCTACTAGCTTT  
GCCACATTTCACTAAACGCCCCGCACAACCCCAAGCAGCC

>RXA01074  
TTGGCGGAAGCCGAGGTCTACGCTGGCTCGCCGAAGCATCTTCAGCTGTGGCACAGGTT  
GTTAGCGCCGACGAGAGCAGATCACGACTGTTGGCGTCGAAACGCAATTGCCACACCC  
GATGCGGCCCTTCAAGGCCGGCGAAGAGCTCGCCCGCATCCACCTTGCCGGCGCCCCAGCG  
TTCGGCTGTCCACCAGCGGGCTGGGCGGGGTTAAACTACATCGGCACCCAGGGACAAGCA  
TGCTTATCGACGCCACCTGGGGTGTTTTTACTCCCAGCAACGCGTACTCCCGTTTGCG  
CGCCGGGCACGAGGCGAAATCACCTCACCGAGCACGCACTCTGGGTCTGGAAGCCGCT  
TGTGATTTGATTAGCGAACTTCCCGATGACGTTCCCCCGCCAGAATCCACGGCGACTTG  
TGGTTTGGCAACCTACTTTTTGGCACAGACGGGCCCTGTGTTTATTGACCCCGCAGCTCAC  
GGCGGTCATCCCGAAACTGATCTCGCGATGCTTGATGTATTTGGCGCACCCATCTCGAT  
GAAATCCGGGAAGGTTATCTGTCTATCAACCCGCTGCCAGACGGGTGGCGTGAACGCACC  
CCCATGCACCAACTCCACCCCTTTGGCCGTACATGCGGCGTCTCATGGGCCAAGCTACGGC  
GTGGAATACTCCACGCCGCCAAAGCGACACTCAAACCTGTTGGAT

>RXA01074-downstream  
TAACGCCACCAATTTTCTCTGCGG

>RXA01075-upstream  
GCGGTGCGTGTTTCATTAGCAGGTCAAGCGCGTAATTGAGGGCTAGACTGGTTAGTACCGG  
ATATTCTTTTTTCTTTAGTTTGTGGGAGTGGAGATAACT

>RXA01075  
ATGGACAATCCAGTCAACATCCTCAATGAGCAGGAAGCTTTGGAGCGCCTGCAGTCGGTG  
TCTCTTGGTCGCGTGTTGTTTCGTCGACGATGAGATGGACATTTCCCGGTGAACCTC  
ATTGTGGATAAGGGCGCAATTTACATTCTGATCAGCTGAGGGCAACAAGTTGTTTCAGCATG  
AATCTCAACCACGATGTGCTCTTTGAAGCCGATGAGGTCAAGGACGGAAGGCCTGGTCC  
GTGGTGGTTCTGCGACCGCAGAGATTGTGCGCAAGCTGGATGAGATCGCTACTGCCGAC  
ACTTTGGAGTTGAAGCCTTGGATTCCAACCCCTGAAGTCCAACCTTTGCCCGTATTGTTCCG  
AATGAAATCACTGGGCGGGAGTTACCCCTCGGCGAGGAGCCTGAGCGCTAC

>RXA01075-downstream  
TAGCTTTGCCACATTTCACTAAA

>RXA01076-upstream  
TCCTCCCATTAAAGCACCTTGTCTTCCGGAAGCTTCCACCCCAAATTCCAAACCCCAAATT  
CCATGCCCCGGATGGACATTTTTTATTACACTCGGGGGCT

>RXA01076  
ATGACTCCAGCTCACATATTTTCTGAAGGTCCAATCAATAGTGTGTTCTCAGCCAGGAT  
GAGGATGGAAATTTACCACCTCCTACCAGGACACGTTCTCTGATCCATCATTTTTGGGG  
GAAGGTGACGTTCTAATTGAGGTTGGTTGGTCCAGCTTGAATTACAAGGACGCAATGGCT  
CTGAAGGTGATAAGGGAGTGGTGCGTACTGTGCCACTGATTCCAGGTATCGATGTGGTG  
GGCACTGTGATCGAGAGCGCTGATCCTCGCTTTGGTCTGGTGATGAAGTGGTGCTGAAT  
GGCGCTGGTTTGGGGGAGAACCAGGATGGAGGTTTCACGCAGCGGCTGAAAGTGCCGTCT  
GAACCGTTGCTGCATATTCATTTAACTTCTCCGCGCAGCAGGTGGGTGCGTTGGGTACT  
GCAGGTTTCACGGCTGCGCTATCGGTGAATGCTCTGGTTCGATCAAGGTATCAAACCGGAG  
GATGGGGAGATTCTGGTAACTGGTTGCGACTGGTGGTGTGGGTTCGATTGCACTTCACTTG  
CTGAATAAGTTGGGATATACGACGGTCGCGGTGACGGGGCGTCGAGAAGCGCATGCCGAA  
TACCTGACCAGCCTGGGCGCAAGCGACATCATTGATCGCGCGGAGCTTTCTGAAAAGGGC

CGGCCGCTGCAGAAGGGGCGTTGGGCGGGTGTAGTGGATTTCAGTGGGATCCCACACACTT  
GTCAATGCGATTGCTCAGACAAAATGGGGCGGAATTGTCACGGCGTGTGGCATGGCTCAG  
GGGCCGGATCTGCCGGGAACGGTGTTCGGTTTATTCTTCGTGGCGTGCATTTGGTTGGC  
ATTAACCTCTGTCGATGCACCCCGTGAGCTGCGTGCACGTGCGTGGGCGTTGCTGTCCGAG  
CATCTTGATACCGCGGTGCTAGATGATATGACCACTGTGATTGATGTCAAGGATGTTGCT  
CAAGCTGGCGAAGATTTGATGGCTGGCAAGCTTCACGGACGTACCGCGGTGCGTGTTCAT

>RXA01076-downstream  
TAGCAGGTCAAGCGCGTAATTGA

>RXA01078-upstream  
ATCATTCACGAGCTCGATAGCCGACAGGTTTCTGAACTCACAGAAGCCCTGGCCAAAGTC  
TCCACCACCCGACGCTAAAACCTTTTGAAAGGAGCTCATC

>RXA01078  
ATGAGCAACGCAGTACCCACAAACGTTTCCTTCAACTTTGTTCCCCGCGCTTACCGTCCA  
GAAAAGCCCCGCACATTCGGCATGACAGAAATTTCGTGCACCGTACTACTCCACTTTCGGC  
ACCCGACACCTCCAGGATGCTCTTCGATGTTGCAGGCCAGTGGGTGGACGGCATCAAATGG  
GCAGGCGGTTCCCTTCTCCCTGGTGCCGACCGAACAGGTGCGTGCTTTTAGCGACATCGCC  
CATGAAAACAATGCCTATGTGTCTTCCGGTGGCTGGATTGAAACTGTGCTTCGCTACGGC  
GACGACGCAGTTGATCATTACTTAAAGGAAGCCAAGGAAGTCGGCTTCGATGTTATTGAG  
ATTTCCACCGGATTTCATCATGCTCAACACTTCAGGTCTTCAGCGCCTGGTAGAAAAAGTG  
GTCAAGGCAGGCCTCAAAGCAAAACCTGAACTAGGACTACAGATTGGTTCCGGAGGCGAC  
TCTGGTGAGGCTGAACTTGCAGCCGAAGGAAAGAAAGACATTGGCGATCTGGTTGACCGC  
GGTAAAAAAGCTCTCGACGCCGCGCATCCATCATCATGATCGAATCCGAAGGCATCACC  
GAAAACGTCACCGAATGGGATACAGGCGCTGCCGCGTCCATCATCAATGGACTGGGATTA  
GAAAACGTCATGTTTCGAAGCCGCGGACGCCCCGCTCTTTGAGTGGTATGTCAAAAACCTAC  
GGCAACGAATGCAACCTGTTTCGTGACACAGTCAAATTCTGCAACTTGAAGGGGTGCGC  
CAAAACATCTGGGGCAACAAGAGCACCTGGGGACGAGTAATCAACCCTGCGCCT

>RXA01078-downstream  
TAAATACCAGGTTCAGGGAGGGCA

>RXA01083-upstream  
GTCGACATACTGGCACGCAAGATCTGTGTACCCGGCCCCACGTGCCTAAAACCTAGGTGAGC  
GAGACCTTCGAGCAGTTCCCTCGAAGGAGAGTGATCCACCT

>RXA01083  
ATGTTTCCGCGAATTCCGCTGGCAATGTGTGCTGTGCGCAGCAATCCCTGCTGTTGTGCTC  
AGGTTTTCTGAGCTGTTCGGCGTCACCTGTGGCGACCATGCTGATTTTGGTACCGCAGTG  
GTTGCTGCCTCTTTTGTGTTGGCGTGGGCAGCTGAAGCTGTGCGCAAAGATATTTCTGGT  
GCGTTGGCAGTGGCCTTGCTTGCGTTAGTTGCAGTGCTTCCTGAATATGCTTCTGAAACG  
GTTGTGAGCACACTTATCAAACATCGGCGGCGAAT

>RXA01083-downstream  
TAAGAAGGTGAACAGTTGACGCA

>RXA01085-upstream  
GAAGGGTCGTAATGAGCGTTGCCGCAAAAACCTTCAAAGGTGGTGGCACCAAAGATCTTAA  
GCAGACTGATCGGACCTTTGATCAGCTGCGAAAAACAGCGG

>RXA01085  
GTGACGGATAAAGCCCCGAACCGTGACGTACACAATGAGCAGCAACTGGCACGCGGTGAA  
ATCGGAGAAATGCGCTCACCGATGTGGGTTGAGGTGGGTGCTGCGATTCTGGGCGTGT  
GTCCTGGTTGTGATGTGGCTGGCCTGGGGCGGTATCGGGCTGCTGATCCAGACCATGATG  
AATACTGGCTCACCTAATGACAAAGAGCTTTTTGATGAGCTTGGTGTGAGACCTATTAT  
GTTGCTGTGCAACAGCAAATCGGCACCAAGTAGTGCTCACACCACGTGCTACCAACCGCTT  
GATGAATTTGGCAATAATTTTGGCGACTGTACGCGTAGCGTGCCCTAAAGAGCCAGTGTGG

TACGCCGATTATGTAGCTAGTGTGTTTCGCAGAACATGGCTTTGATGCACCAGAACCTATT  
GATAATTCGGTGGGTAGCTGGCTGTTATTTGGTTCATGTGGGCATTATTCGGGTGACGTTT  
GTGATTGCGGTTGCAGCGGGTGTGTATGCGATGTACGCGCAGCAATGATGCGTCAGCTA  
GAAACACAAAACGTCGCTGTGGACACCACCGATATTAACCAGCACACCAATGACGCACGT  
TTGGCGATTCCGCGAGGAGATTGTGCGCGATTGTGAGTCTGTTCCCGATGTCGGTGCACAC  
TCACCAGTCCAGCCCTCAAGCATGATTTCCCATGTGATGCTGTGCGAATAAGGGCTTGAAA  
AAGGTGGATGTAACGCAGTTTGCACAGGAGACAATTATCGACAATGACACTGGTGAATTT  
GTCTCTGAAAAGGGTGAAGTGCTCTATGACGGTGCAGGACAACCGATCACAAAGAGCTTG  
CCGATGATTGACAACGAATTTAGCCATGCGATTTTGTGACAAATCAGATGTCCCGAATCTT  
CCCAGCTGCGACGGTCTTTAATCCAGCAAAGATTGAGTGGAATCCTGGTGGTAGT

>RXA01088-upstream

TGCCTTGAGTCTAATTCTCCCGCCCGTGCATGGGTTTAAGCTGGACTGATAAACCTTTT  
GTGAACCGAATTTTTTAACTGATTTGAAGAAGCGAGAATA

>RXA01088

ATGGGACTGTGGATCGATGCAACCGCTGGCGTTGCAGGGGATATGTTGCTGGGAGCACTC  
ATTGATGCAGGTGCAGAACTAGAAAAAATCCAACAGGTTGTGGAAGCAGTCATCCCCGGT  
GACGTGCTCTTGGCGACCGAAGAGGTAGTGCGCCAAGGCCAACGAGGCATCAAGCTGCAT  
GTGGACGCACAACATGAACACCATCATCACCGCCACTTAAGCACCATTAAAGAAGTGTCT  
GTCAATGCTGACATCCCTGAACAAACCAAGCAGGATGCCTTAGGCGTTTTTGAATCATC  
GCTATCGCTGAAGGAAAAGTCCACGGCATCGAGCCGGAGAAAATCCACTTCCATGAGGTA  
GGAGCTTGGGATTCCATCGCAGACATTGTGGGTGTGTGCGAAGCGATCAGGCAGCTTAAC  
CCAGGTTTGATTGCTGCATCTCCGATTGCTTTAGGATTTCGGACGCATCAAGGCAGCTCAC  
GGAGATATTCCAGTGCCAGTTCCAGCCGTGGCAGAGCTGGTGAAAGGCTGGCCACCCAA  
ACCGGAGCTCTTATGGAGAGCACCAGAACCTGTTGGTGAATTAGCCACCCCAACTGGTGT  
GCGTTGATCCGTCCTTTGCCACCCAAGATGGCCCTTTCCAGGTGGCATCATCAATGAA  
GTTGGCATTGGTGCAGGAACAAAAGATACAGAAGGCCGTCCAAATATAGTGCGCGCAATT  
TTGTTCAACACCTCTAGGAGTAACCCAGATACCCGCACACTGGTGCAATTAGAAGCCAAT  
GTTGATGATCAAGACCCACGGCTGTGGCCAGGAGTAATAGAGATCCTCTTTGCCGCTGGC  
GCAGTAGATGCATGGCTGACTCCAATTTTGATGAAGAAGGGCCGTCTGCACATAGGGTG  
TCAGCATTGGTGGATAGCTCCGAGGTGGAAGCAGTGAAAACCGCATTATTTGCAGCCACC  
ACGACTTTTGGGATCAGATCATGGGAAGTGAACGAGAAAGGCTTGGACCGTCGTTTCGAA  
CAAGTCGAGGTGGACGGACACACCATCAACATCAAAATCGGTTCCCGTGATGATCAAGTA  
ATCAGTGCACAGTCCGAGTTTGAAGATATTCCGCTCTGCAGCGGTGGCCTTGGGAATTTCA  
GAGCGGGAAGTTGTGGCAAGAATTCGCAAGGCACCAACCGAG

>RXA01088-downstream

TAACAACCAAAAGGTCGACTGCT

>RXA01091-upstream

TCGTCCGAAAACTGGCGATACTATTGATAACGGGCATGGGTTACCTTCGATAAAGCAC  
GGTCTATGCTGGACTATCGCCTTTTGACACGAGTATCGCA

>RXA01091

ATGGTCCCGAACACAGTCCTTATCCATGACGAAACCGCCGATCTGGCGACGCAGATCCAG  
CGGCTGGAACATATCATGGCGTGCCTGCGCGATCCGGTCAGCGGATGCCCGTGGGATATT  
GAACAGACCTTTGCCAGCATCGCGCCCCACACGATTGAGGAAGGCTACGAGGTGCCGAC  
GCCATCGCGCAGGAAGACTGGCCCCGAGCTACGCGCGAGTTGGGCGATTTGCTGTTTCAG  
ACCGTGTTTCACGCCCAAATGGCGCGCGAGGCAGGCCATTTGCTTTGGTTGACGTGGTG  
AAGGCAATTTCCGACAAGATGGTTTTGCGCCATCCGCACGTGTTCCGCGCGCAGTCGAAC  
GCGAAATCCGCCGACCAGCAGGTGAAGATTGGGAAGTCATCAAGGCGCCCGAGCGCGCG  
GCAAGCGCAAAAGGGCGTTTTGGATGGCGTCGCGCTGGGACTGCCTGCCC

>RXA01091-downstream

TGATGCGCGCGACGAAGCTGCAA

>RXA01092-upstream

TGAACCCATGCCCGTTATCAATAGTATCGCCAGTTTTTCCGACGAGATGACCCGCTGGCG

CGGTCACCTGCATCAAAACCCCGAAATCAGCTTTGATTGT

>RXA01092

GTGGAAACTGCGGCTTCGTGGCCGAGCAGCTGCGCAGCTTCGGGGTGGATGAAATTCAC  
ACCGGCATCGCGAAAACCGGTATCATCGCCCTGATTACGGGCGCGAGGCTGGCCCCGTC  
GTCGGCCTGCGCGCCGATATGGACGCGCTGCCGCTGACCGAGATTACCGGCGTCTACTAT

>RXA01096-upstream

ACCGTGAAACAAACCGGCGGTGCGTGCCACACTGGTGCCACACATGTTTCGACAATGAC  
GTTTTGCTGTAAAAGCAACAACGATTAAGGAAGAAATCTT

>RXA01096

ATGAAGCCACGCGTGCTGTCAGCATTAGGCATTGGAGCTGGCGCCCTGGTTGTCTGGATC  
AGCTCACGCATGAACTGGGTAACCATCGAGGCTTTCGACGATAAATCAGGTAGTGTCAAC  
CAATCTATTGTGGGTGCAACCTGGTCTACAGAAATCATGGCGCTTGCACTTGCTTTGCTC  
GCTGCCTTCGCCGCCCGCTTGGTGTCTAAGCGCATGGGTGGCGCATCATTTGGTGGTATT  
TCGGCGCTGATCGCGGTGGGTGCCAGCCTGTCTCCACTCGCGCTTCTCACCCAAGACCCA  
GACGCAAGACGGGCCGAACCTTGCTGACCTCCGGTGTTGGCCTCACAGAAGGCTAATTCC  
GGAACCTGTGTCTGTATTGGGCGGAGATCATCAATACCACCACCCATCCACTGGCGGCA  
GTGGTAGCCATGATTGGCTGCGCGCTAGCCCTAGTCGGCGGCGTTGTCTTGCCATGCGC  
CCTGCCGAGGACACCGCGAAAAGCAATCAGTATGAGCGTAAACAGGCTCGCGCTGAGAAA  
ATCCACACCGATTGTTGCCCAAGATCCAGACTCCGGTCGTGTGATGTGGACGCACTCGATG  
AAGACATTGACTTCACCGAGAAGACTCAGAAATCCAAAGAAACCCAGGTCAAAGCTAGG  
GTGTGGCACCCCTGATTTCTTTCGCCATGTGTGTTTCGGGA

>RXA01096-downstream

TAACCTTAAACACAGCATTGGTT

>RXA01102-upstream

ATTCTATGGTTGTTGGGAGAGATGACTTAATTTGGAATCACGGGCTTTAACACGCGCTGA  
CATTGAGCAACTTCCCAGCATGTGGAAGCCAGGTTTC

>RXA01102

GTGGCTGTCTCGTGCGGTTGCAGCAGCGTTCCGGCAGTTGGTCACTCCTTCTTCCCGTC  
GTACCGCTAGCGGTCCTCAACAACGGCGGATCAAGCGCTGTCGCCGGTGCCACCACTGGC  
ATCTTCATGGCAGCTACAGTGATCACTCAGATTTTCACTCCCGCTGCGCTGCGGAAAATT  
GGCTACACCCCAAGTATGGCTTTTCGCCGATTCATGCTGGGTGTGCCAGCCATCGGGTAC  
ATCTTCAGCGTCGAGCCAATTCCAGTGCTGGTAGTGTCGCGACTTCGAGGAATTGGGTTTC  
GGTGCGCTCACCGTCGCGAATCTGCGTTGGTGGCTGAACTCGTTCCCGTACGCTTCTTG  
GGCAAAGCTTCTGGAATGTTGGGCGTATTTATTGGCCTTTCCCAAATGCTTTTCTTGCTT  
GCCGGGTGGCGTTAGGTGACCAATTTGGCTACAACGTGGTCTATGTTTTAGGTGCCGTT  
ATCGCACTAGTTGCAGCGGTGATGTGCTGCGTATTCGCGAGGTTAAGGCAGCGGCAAAG  
CAGCAACCACAGGTGAGCGAACAGGAGCGTTCTGTTTCCACCTGGAAGTTGGTGCTGGTT  
CCCTCCTTGGCTGTTACCAGTTTGTCAATGACTTTTGGCGCAGTGTCTTCATTCTTCCA  
GCTGCAGTCATTGAGTTAGATCCAGGATTAGGTGCTGCATTAGCGGGTATTATTTTATCC  
ATTACCGGTGGTTCTTCAATGGTGTTCGCTACCTGTCCGGCGTTATCGCTGACCGCCGC  
GGTGTGCTTGGTACCACGATGATTCCTGCTCAGATCATTTGGGTTCTTAGGTGTCTGTTTA  
ATCACCGTCACAATCTTCCAAGGCTGGTCCCGTGTGGCTTTTGATTATAGGTGCAGTGATG  
TTTGGTGGTGCTTTTGGCATGGTGAAAACGAAGCGTTGCTTTCAATGTTTTTCCGGCTT  
CCTCGCACTAGAGTCTCCGAAGCCTCCGCCATCTGGAATATCGCCTTTGATTTCGGGAACA  
GGAATCGGAAGCTTCTCTCTTGGCATAGTTGCCGATCGCTTGCTTACAGTGGTGCTTTT  
GGTTCCGGAGCCGTGGTGATTTTGTGTTGGAAATCGTTTGGACACCGCCGATCGAATCAT  
GGGCGGCACCGCATTAATGAATACAACAACACCCGCGCGCGTTTGGCGCCAGGTGCCAGTC  
GCTCGGCGTGAGTGCAAGGGCTGCGCAACAGGCGCAAAGATCGC

>RXA01102-downstream

TAAAACGCTTTTCGACGCCACCC

>RXA01103-upstream  
CCGAAGCAGAGTACAAGGCTGTTGCCCGTGCGCTGCGCGGTGCCGTAGAGATGGATCCTC  
GTCAAACAGGAATCCCATCCACTAAGGGAGCGCTCTAGAC

>RXA01103  
ATGAACTCTTCTCCCATCTCTGATATGGTCACTGCGGCTGTGCAGAACGAACCAGATGCG  
GGCGACCGATGGTTTATTTATGGTTTGTTCCTCATCGCCGGGCTTTTCTTTGGCGGTGCC  
TGGTCTGCATATAAAATCAGAAAACAAATCCTCATGGTTGCAGCCGGCCTCATCGCAGTG  
CTGGCAGTGGCTGGAGGAATTCTATGGTTGTTGGGAGAGATGACT

>RXA01103-downstream  
TAATTTGGAATCACGGGCTTTAA

>RXA01107-upstream  
GGGTACATCAGAGTTCATTTGAATTAGACTTAAACTTAAAAATGACCACCCAGATTTAC  
CTGAATTAAACCCGCTTTCACCTTTGAGATACTGGAAGGA

>RXA01107  
ATGGATTTACCTCTGTGAATGATCGAAACGTCCCTGCACCCAACACCTCCATTCCTTTC  
CCAGTTGACCTGAATCGAGTGACGGAGGCTGTTGATTCTTGGGCTACCCTATTTGAGC  
TCAGAAGATCGCATCATCGTGCCGTGGCAAGATCACCGCATTTTCGATGTACTTCAGCCAC  
GAATCAGGGCAAATGCTCACCATCCTTGGTTCGCACGCGCCTTAATTTGGACATGTTTGCC  
ATCAACGATGCGGCGCGAGCTGTCACCGAATGGAATGCCGAACGCATCGGGCCAACAGCC  
CTCGTCCATCTGGGCAACGACGGCGAAGTGAATTGAAATTCCGCACGACCATCTGCATC  
GATGAAGGGTTAAGCACCCAACAGCTACGCCAATTCATCAACCTGTCTTGGACACCACC  
GCCATGGCTGTGACCTATATTCTGGAGCGTTTTTCAGAACTTAACTTCAGCGACACCGGA  
AGCCCTGACGACACGAACAATGCCGATGAACTCAGCGACGAACAAGACCAAGCAGATCTC  
GTAGAGAAAATCCGGGGGCTGTACGTTCCCACTCCAGTTGAAGAGCTCATCGAATCCCTA  
GAAGACGCAGAGTGGGAAGAATCAGACATGGCAGACGAGGATGCAGAAGACGACTACCTA  
GACGATGACTCAGAAATCGAATGGGAAACAGACGATGACTACTTCGAACCTGAAGAAGTC  
GACATGGACGAACCTCTCAACGGTTTCTCTGAAGATTCTGACATCCCCCAGGAAGTCACC  
TTGGAACGCATTCGGGCACAACCTGCATGCCATCGGCGTGGTAAAAACCAGCGGCGAAGAC  
GATTTTCATCATCGCGTGGATCAACGAAGTGTTTTTAGGCTTCTTCGTTGATAATGGCCCC  
ACTTTCTCTGGTGAAGGTCTACTGGGATCCCAGCATGGACCCACACGCGACTTCATGAAA  
CTGTTTCATGATGTGCAATCAGTGAACGAAAACCTCTCTGACTACCAAAGCTTTTGGCCAT  
ACTGATGACAAGGGTCTCCAGGTCCGGGTAGAGTTTCGCGGTCTCTGTGCTGAAGGCCTC  
AACGACGATCAACTACAGCACAACATCGCACTGTCAATTCATCATATTTTGCAAGCGATT  
GATTCCATCAGCACAGAAGCCACTGGATCATCAACGGTGGAAATGGCCGGAGAAAAACCGC

>RXA01107-downstream  
TGATCATTAAGGTCTTCCAAGAA

>RXA01108-upstream  
GTGGCCAGTGGAAGTTCTGCGACTAATCCACAGAGCTTAAACTCCGGTTGTCAGTTCAG  
GTTGCAAAGTTAACAGTCAACGGCTGTATTCTTTAGAGCC

>RXA01108  
ATGACATACCCCGGCATCACCTCTGACCACAATCCTTATGATGGATACACAGGCGATGAC  
GGGGCCGGAACAAGCGCAACCTCCCAAACCGAAAGAAAATAAACAATCGGTGGGAGTT  
TACGCTGGTGTGTTTGCCCTAACATTGGCTTTATACGCCATTGGGGGAGCCGCATGGGGA  
CTGCTCCGACCCACTTATACCGCTTATGTTGAAGACGCTGAAACAGCCTCCATAGCGGTG  
GAAACCAACACTTCTTTTGCCGGCTATGCCTGGTTTGGCATCGCCACCGGTGTGCTTGCA  
GCAGCAATCGCATTATTGCTTTTCTGCGCACCCCTCAACATCGAGGCCAGTTATGCTC  
CTATGGCTGGGAATTGTATCTATCGCAGGTTCCTGGCATTCCTGGTGTGTTGGAAACGTG  
GCCTCGACGATGCTTCATGGTTACCATCTGATTACGCCCTCAGCGATCGGTGCGTCTTTC  
CAGGTAGCACCCACTATTACCCCTGGTGTGCGTTTGGGGTCGCTCCATTTTGTAGTGTG  
TGCATGTATTGGTGCAGCGGCATTTGTGACACCTGAAGAAGAGATAGACCAGGACGACGCA  
GGCCAGGGGACTTCGAAAGCATCGGGGTCTGAGATGACTGGGGCTAGTGGC

>RXA01108-downstream  
TAGGGGCTAGATGTGCGCAAACA

>RXA01109-upstream  
GGGTCGTACGCTAGATTGCTTTGCTAGGGTAATCTGCGTGAACCGTCCGGGAATTTTAA  
GTTTTCCGGAGCATGTGCGATGATTTATCAGGAGCAGAACT

>RXA01109  
TTGTCTATTAGCCTTTCCTCAAAGAAGGTTGCTTTTCGCAGCACTCATGGTCACCCCACTT  
CTCTTGACCGCATGTGGCAGTGATTTCATCTGATACTGAAGCAGCCTCATCCAGCGCAGCG  
ACGACGACAAATTCTTCTCATCCAGCGCAGCGACCTCGGCGGAAGCAGCAGAAACCACC  
TCGTCCGAATCTGAATCTTCCGAAGCAACAACCATTAACGAAGAGCAGCAAGCACAGCTT  
GATGTACTGTCTCAAGAGCTGTCTGAGAACCCAATTACCTTCGCTGAAGCTGCGCCAGTT  
GAAAACGGCGAGACCGCTTCCCCAGAAGACACAGCTGCCATCGAGGCTCTGGTTCGCGGA  
TACACTGACACCAACACCTTGCGTAGCTCCCTTGCGTACACCATCAACAACACCTGCACC  
CGCGTTCTTGAAGCCAGCGGCGCTGACGCTACCCAGCTTGATCTCAACACCATCCCTGAT  
ATCCCACCTGGGTGGCGAAGGCACCGGAACCTGTTGATTCCATCACCAGTGTGTGGTCAAC  
GGCCAGGAAGCATCCGCATGGGTGCTAGCAACCGCCGGTGGAACCAACCGACTCTGCAACC  
CAGCGCTTCTTCAACGAAGGTGGCCAGTGGAAGTTCTGCGAC

>RXA01109-downstream  
TAATCCACAGAGCTTAAAACTCC

>RXA01119-upstream  
CCGTAAAGACGTTGGCGAAGTCATCATCAACGGTGCCGTTGCCCGTGCGGAAGCCGAACC  
AGAGATGTTGGAAGCTGTGCGAGAAGAAAAGACCGCGTAG

>RXA01119  
TTGGCAGGAGTTATCACCGGCTTTGCCATCATCCTGTTCGGTTATCGGCGTTGGATTTCTT  
CTGGCAAAGCTGGGGGTCATCAATGATGACAAACAGCGCTTGGTGTAAACCGCATTGCT  
TTTTATGCGGCAACTCCAGCGCTGCTTTTCAATGTTCGTTGCCCGATCAGATCCCAGCGCG  
TTGATCTCACCGGTCATGTGGTGACATTTGTGGCCACGATCGTCACAGCAGCTGTGTAC  
TGCGTGATTTTCGGCGATTTTCTTTAAGAAGGATATCGCCACTACGGCGACAGGAGCTGCG  
GCTTCTGCCTACGTGAACTCCAACAACATTGGCCTGCCGGTGTCTATTTATGTGCTGGGA  
ACAGGCGCATATGTGGCACCGATTCTGGTCATGCAGATGGTGATTTTCGCGCCCATGATC  
CTGGCCGCGCTGACCTCTGGTGATGTGAAAGGCTCGCGCGGGCAAAAATATGGGCTGCG  
GTGAAAGGTTCACTGCTCAGCCCAATTGTGTTGGCCTCTATCGCGGGCCTGATCGTGTGT  
CTGTTAGAAATTCAGCTGCCAGCCGAGTCATGGAACCCACCATCATTTTGGGCGGCGCA  
TCCATTCCGTTGATTCTGATGAGCTTCGGCGCATCATTTGCCCTCAACCAACGTGCTGGCT  
TCCAAGGCGGATCGCCCCAGCGTTCTTACTGCTACTGCGATAAAAATTGTGGGTATGCCC  
GCCATCACTTGGCTGATCGCCAAGGCGTTTGGTCTGGAGGGCGATTACCTCTACGCCGCT  
GTTATTTTGGCGCGCTGCCCGCGCGAGAATGTGTACAACCTACGCGGCGACGTACCGC  
AAGGGCGAGATCGTCGCCCGGATACGGTCTTCTCACCACGTTCTTAGCGCTGCTGGGC  
ATGCTAGGAATCGCGGCCCTATTTGGTTCG

>RXA01119-downstream  
TAGGGCTTCAGGCTGCTTTTCGA

>RXA01121-upstream  
AAAGATTTACTGCGTACAACCTCTAACCAACAATATTGGCAATGGGTTGTTCCATCTTAGC  
GCTTTACCTGTGAACTCTGCAGAGCGGTACGCTTAAGCTA

>RXA01121  
ATGAATCCCGAATTTATTACGGCGCAACCGAAATTGAAACCACAAACAGGGGCCTTCGC  
CCGCATCGACTCAGCAAAGAAATAGTAGAACGCTACTGTGATCCCCAGTTTAGCGCGATG  
GAACGCCAACCATCGGGCGTGCGGTTGTGTGTCGCACCACCGCCACCTCCGTCACGCTG  
ACCACGTATTCCACGCGGGTGGTGTACCTCGATTCCGGCCGGCCGGGCGGAAGATTGAT  
GTGCTTATCGACGGCGCCCCACATCTTCCACGCCAACTTCCGGGGCGAGACCACGGAA



GTCAATTTTCATCACCGGCGCCACGGAACGGCGCCTGAAAGATCCGCAGGTGCTCACAGTG  
GATGGACTTTTCAGAGCAGGAAAAGGTGGTGGAGTTCTGGCTGCCTCACAAATGAAGAAATT  
GAAGTGATCTCCCTTAAAGCCAACGCAGCTTTAAACACTGTGGAAGACACCCGTCCCGTG  
TGGATCAATTACGGCAGCTCCATTAGCCACGGTTCGGTTGCCACTGCCCCAACCAAAATT  
TGGCCAGCCATTGTTGCCCAGTCCAAAACTACAACCTGCGTAACCTCGGTTTTGGTGGC  
AGCGCCATGTTGGATCCTTTTATGGCGAGGCTAATCAGGGATACTCCAGCTGATCTGATC  
ACCTTGGAATTTGGCATC

>RXA01122-upstream  
TATTCGACCAAGGCTGAGCAAAAAGGCGCTAAGCTGTGGGGAGATCGCAAGCCCCCTATCC  
GGCCTCTACTAAGCCCCGAAGTTGAAGGGAACTCCCCCA

>RXA01122  
ATGCCGTTTCCAGCACTGTTGTTGCCGCTGATTTTCTGGACAGGAATTGCAGCTTTGTCC  
TCTTGGGCGGTTCAGCCGTGCACTTCCGCTGCGCGCCGATAATTCCATTGAGATTGATGCG  
CCGGTGGAAAAGGTCTGGGATTTTCATCGAGGAGACCAACCGCGTGCCGGAGTGGAATGAG  
CACATTCTGTACGTGCAGGCGCCTGGTGAGATCGAGCAGGGCATGAAGCTCAAGATGAAA  
ACAAGGCACCCAGAGACCAATCGCCTCACTTTGAAGTTTCGCCCCACCATCGACGTGCTG  
CGTCCACACCGTGAATTGACGTGGTCCACCAAAATTGTTGCGCGTTGGCTGCTCACCGTC  
ACCGACACGATCGAGCTGAAGCCTTTGGAAGATGGTTCGCACTGAGGTGGATCAATCAATG  
TCCTTTAGTGGCGTACTATCCCCCGAGTGCCTTTTGGCCAGCATCAGCAGGATCAAA  
GAGAACTCAAACCGCCAGTTGAAAGCACTGATCGAAGCCGAG

>RXA01122-downstream  
TAAACCTCCAACCCCTACATAAC

>RXA01123-upstream  
AAAGAGCAGTGATTTTCCCGATCCCCCCTGGCCGCTAGCGGAAATTATTGATACCGC  
GTGGCGGTTGGTGAAACACGTGGCTGGGCGAATGTGAGC

>RXA01123  
ATGCGAACCCTGGCCGCGGAGCTAAATATCAAGGCGCCGTCGCTGTACAAGCATGTAAAA  
ACGCGCGAGGATATCGCCGCACACATCGCCACGAAGGCATTATTCAGCTGGGGCAAAGC  
CTGCATGAACATTGTGAAAGTGTGGAGGATTTGCTTGCGGAATACCGCTCCATGGCTCGG  
GAAAATCCAAATATTTACCGGCTTCTACCAAGTTCAGAGTTCCCCCGCGAGCTACTTCCA  
GAAGGCCTAGAACTTGGGCAGGAACGCCATTCTACCTGGTCACCGGCCACGATCCGATC  
AAGGGTCAAGCACTGTGGGCATTTCGCGCACGGCATGGCCATCCTGGAAATCGACGCCCGA  
TTGCGCGGCCCCAACAAATGGATCCCCCGCGATGGCGTGTGGGAGATCGGCGCGCGGGCA  
TTTGACACACAAGTATTCGACCAAGGC

>RXA01123-downstream  
TGAGCAAAAAGGCGCTAAGCTGT

>RXA01127  
GGAATTGGCCTCGCAGCATCCGGCAACATCGATGCCACGGGCACCAACCCTTCCATGTTC  
GAGCCAGTCCACGGCTCTGCACCAGATATCGCAGGCCAGGGAATCGCAGACCCAACGGCA  
GCAATCCTATCCGCTGCGATGCTGCTGCGTCACTTAGGTGATGAAGACAACGCAGTACGT  
ATTGAAACAGCCATCGCAGCTGATGTGGCTGGCCGAGATAACTCTCAGCCGATTTCTACC  
ACTGAGGTGGGAGACCGCATCGTCAAGGCGCTGCAAAGC

>RXA01127-downstream  
TAAATTTCAACGCCGACCCCTT

>RXA01128-upstream  
ATTCGAGTACAAATAAATTTGAGAACAAAAAGATGGGGGAAATATGTTAAAGTGC GTTA  
TATTGCTTTAGCGAAAGTAACCTCCATGCATCAACGTTTCG

&gt;RXA01128

ATGAGCTTCACTTTTCATTTCGTACTTTTTTCGTACTTTTTGGCATCACGTTGTTAGTGTCA  
 TGC GTTCCAGAGCCTCCTGACTCCTACACTAAAGAATCCACTGTGCTGCGGTATCAGGTC  
 TCTGATTTCAATCTAAACTTCGTGGAATTAGCAGTTGCGCTTGGGTATTTGAACAACATT  
 GAGCTCCAAGTAGTCGGATCTGTACAAGGCGGCGTTGAGTCCATTGAATCGCTCAAAAAG  
 GATGACATTGACTTCGCGGCAGTCCCCTTTCATTGGCCTTGTTGCAGGAGAGATAGCCACC  
 GGTGCGCCCATCAAAGCAGTGGCCGCAAGTTACGGAATTTCCCACGATTCTTCTTCTGCA  
 CTTCTAGTCCTTAAAGACAGTGAGATACACGAAGTGCACGATCTCATTGGCAAAACAGTT  
 GGCATAAAACACCCTCGGTGCTCTGGGATCTGCGATGGTTGAGCGTCATCTATTTCGACGCC  
 GGTCTCACCGAACCTGAGATCGTGAGCGTCACTCAACGTGCATTACCCGGTGAGTACTTA  
 GAACAACGCCTCTACCAGGGGCAAGTTGATGCAATTTGGGTCACCGATAGCGCTAAACAC  
 CAAGCGCTTGAAACTGGAGATTTTCGGATCTTGGCAGAGGATTACAGACCTTGTGCAGGAA  
 CTCAACACTGGCTGCATGGTGGTGTGCGAAAACTCATCGACGAGCACCCTCGAGTGGTT  
 GGAGAATTAGTGGATGGAGTAGCTCAGGCAATCGAGTTGAACGATCCCCTCCCTGAA  
 GAAGTGC CGCAAGTTTATTTCAACTACCTCGAAGCCCATGGTCAGAGTGATAGAATATCC  
 AGCTTTAGATATTGGGAGCATTCGGGCATCGCAACCCGAGGTGGAGTGCTCAGTGATAGG  
 GAGTTTCAGCATGTGGTCCCCTGGATTGACCGCCAATACGACGTCCCCGATATCAATCCA  
 GCAAGTATTTACACCAACCAATTCAACCCATACCGAAAAGTAAACCCCTCGCCA

&gt;RXA01128-downstream

TAAAAGGCAAGGGGTCGGCGTT

&gt;RXA01129-upstream

CAATATAACGCACTTTAACATATTTCCCCCATCTTTTTGTTCTCAAATTTATTTGTACT  
 CGAATGCAGGATTTTCGAGACAATGAGGCAGTTTTTCTTTT

&gt;RXA01129

ATGGTTAATCTCATGTGCGTCAACTCGAAGAAATCCGCGATTTCTTAGCAGGATTTGAA  
 CCTTTTCGCGCAGCTACCAGCCGAGGAAGTAGATCAGTTACCTGGAAAAATGAGCTTGC GC  
 TATTTTTCGGCGTGGGGAAGAGATCATCCCAATTGGTGTGCCCAATCATTACATGGGGGTA  
 ATCAGATCGGGTGCCATTGATGTTCTTGATCAGGAGGGCGTACTGCTGGATCGCCGTGAC  
 GCGGGGCGCTCGTTTGGCTATTTCCACGATGGGGCCAGAACGAAATTTCTCGGTACCGTATG  
 GTTGCCGTGGAAGATTCTTGGTGTGCGTCTGGGGCGTGATGATTTTGATGAGTTAGCC  
 AAGCGCAACCCGATCTGAACCGTTACTACTCCAGCTGGTTCGAAGCGTATCCGCGCCGCT  
 GCTGATCAATTGCGCCAAGAATCTAGTTCTGAAGGTGCTGCGCACGAAGTTGGGGGAGTTC  
 AAGATCGCCAACCCGATTTCTTGCAGCCCGACACCACGATCATGGATGCTGCCATCAAG  
 ATGCATGAGTTGCGGGTGTCTTCGTTGCTGGTGCAGATCGATGGGGAACCTCAAAGGCATC  
 ATCACCGATCACTATATGCGCAGCAGGGTGGTGGCGAAGCATTTGGATATTACAGCTGCCG  
 GTCTCTGAGGTCATGACGGTGGATCCGCGTTGCGCGACCTCGCAGGGGTTGGCTTTTGAG  
 GCCATGTTGTTGATGTGCGAGCTGCGCATTCACCACTTGCCGATTGTGGATGATGGCCAA  
 ATCTCCGGCATCGTCACTGCAGCTGACATCATGCGCTTGCTGCGCCACGATCCGATTTAC  
 CTCACTGCGGATCTGTGCGGAAAAAATACCGTGGAGGAATTGGCCAACACCTTCCAGTCG  
 GCAGCGGAGGTGGCTTCGAGATTTATTGATCGGGGAGCTTCTGCGGAAGAAGTCAGTAGC  
 TTGCTCACCGTGGCTGCGGATTCCTTGGCAAGAAGGCTCCTTGTGCTGGCGGAGCGGAAA  
 TTTGGTGCACCGCCAGTTCCGTATTGCTTTGTGGTGGTGGGCTCGCAGGGCAGGAAAGAA  
 ATGGGACTGGCCTCTGATCAAGACAATGCCCTTGTCTGGACAATTCTTACAATGACCGC  
 GAGCATGGACAGTATTTTGCAGCGCTGAGTGAATTCGTGTGCCAGGGCCTCGACCGCGCA  
 GGACAGGTGCTGTGTCCGGGTGACATGATGGCATCCAATCCGGAGTGGCGGAAAACCTGCT  
 GACCAGTGGATCTCCACCTTCCATTCTTGGATTACTGCGCCGAGCCGGATGCGTTGCTG  
 CATGCCCAGACATTCTTTGATTTACAGGGGAATTTACGGCGACACCGAGATGGCTAAGGAT  
 GTCCACCAAAATGCGGTGAATATGGCCAGGGGTGCGCGTCGCATGCATGCACACTTGGCT  
 AGTCTTGCGGCCCGCGCGATCCTCCGTTGGGGTTTTTCCGTGGTCTTGTGGTGGAGCGT  
 TCTGGTGAATACGGCGCGACGATGGATATTAAGAAGGGTGGCACCGCGGGCATCGTGACG  
 ATGGCGAGGCTGTATGCGCTGGCCACGGGTAGTGATGCGATTGGGACTCGGGAGCGGTTG  
 ATTGCTGCGTCGGGCCATGGTCAGGTGTGCGGTAAGGGTGGCGAGGATTTGTTGGATGCC  
 TTTGATTTCTTAGCGGCGATGGCGTTCCAGCACCGGCGGTTGATCAAGGTGGGGGAG  
 AAGCCGAACATATCATTGATCCCAAGACGTTGGGCAAGATGGATCGGGAGCATTTGCGC  
 GATGCATTTTCCATTATTAAGATATGCAGTCGGCGTTAGCTACTAAATATCCGGTGAGG  
 AACATC

>RXA01129-downstream  
TAGTGTTGGGGCGTCGAAAAGCG

>RXA01131-upstream  
GAATTCATTCAAGGTGGTAAGGCGGTTTTTCGCTCTTTTAATACAGTTTTAAAGGTAGATT  
TGGGAGAGAAGATTTCCCTTAAGAAAGGTTCTTAACAACC

>RXA01131  
ATGCCGCTGCGACGCTGTTCAATGTTTTGACTTCAGCTGGACTTGACCCTCACCAGTCA  
GGTGATGCCATTGTTGTCGAGTCTGCCCATTTCACATTGACGTTACGTGGGATGAGTGG  
CTGCGAGCTCAAGCGACGTGGGTGGGGGAGTTGAGTGCCTCGGATTATGTGCGTTCTATT  
GTGGCGATTAACTCTGCCCATGATGCACGGGCAACGCCGAAGATGATGTTGGATGCCCCG  
ACTGGTCTGACAACGGTGTCTTAAGGCGGATAAGGGTCAGTTGCAGGCGTTTGCCGTGGAG  
GCGCTGCCGATTGGCGATGGCCTCAGCGAGGCTCAGTTGGCGGGGTTTGTGGCTGCCGCG  
TTTGATGGCGCCATCGACCTCACTCGTGAGTTTCATGCACTTTACCCGGAGCGCTCGCCG  
CAGGAGCGCGGCGCAATGCTCAACATTAAGCTTGTGCGACGCCCTCCCCCTCTCAAACAGTT  
ACGCCCCGTGCGAGTAGCTAACTGGTTCATGGATCAGGGGGTGGAGGAAGTTCCTTATGAT  
GCAGTCTCTGGGCGCATCAGCTTTGAGCTGGGTGACACCCAGTGGATGTGATTTTGGAT  
GATCCCGAGTTGTTGAAGATCCAAGCCGTGGTGGTTGCTGACCGCGATGTGGAAGCCACT  
GAAGTTTTTACATTTGTGTAATCGAGCGAACCTGGATTCTGATCACTCCACCATTTTTATG  
CGTTCGGATGGGGATGATGTGGATTTCTGTCGCCACGGTTGCGGTGCCGATTCTGTGCTGGT  
CTGAACGATTTCCAGTTGAGTCAAGCCCTGCATGATGGGGTAGTGGGGGTTGTTGGGCAG  
GTACGAGCTGTGATCAATCAGCTACAC

>RXA01131-downstream  
TAGTGAAGTCCATATAGTGAGAA

>RXA01134  
AGTGCAACCCAAGACACCGGAGTGTGGAAGGGTATCTTCGCACTGCTCATGGGCAGGGGA  
GCACGCGACTGGCGCACCGGACAGCAGTTTGATCGCTGGACTTTTGATGAGCTGGGTTC  
AATTTCCACCAGATTTTCCCCACCAAATGGTGCAAGGAACGCGGCATCGATCCTGTCCCTT  
ACGGAATCAGTACTGAACCGCACCCCGATGGGTGCGCGTACCGAAGTAGTCATCGGCGAT  
ACCCCTCCATCCCGCTACCTGTCTCGTGTCAATCCAAGTCGCTCATGGGTGATGAGGAA  
TTCGATCAGATGCTGGATACCCACCTGCTCAGCGCGGAAGACCTGCACAGTTCCAACACC  
ACGCACTTCTTTGCTTCTCGACGCACCAACTTCATCGACATGGTCGAGGATGCCATCGGT  
AAAGCGGTGATCAGGGACGTCAACGAGTCAGATCTCACC

>RXA01137-upstream  
TCGGTTTGAACGCAACTGCTTGCGCTTGGGTGAGCTTTGAGGATGTCTTCATTCTGGGG  
CTCAGATTTCTAAGCCACGATTTCCCTTACCTTGTGGCATCG

>RXA01137  
GTGCGCCCAACCTTCGTGATCCTACGGATCTCCGAATACTTCGGTGTGCTGAAAGCTGCG  
ATTAATGCAGCCACTGGACGTCTGACCAGCCTCAGCGAAGTGTTTATCGACAACGCTGCC  
GAGATCCAAGACAACCTTTCTTCGCTGGTTCGCGCTTCAGAAAGATTTGGCAGAGCGAGTC  
AACGTTGAAGGAGTCAATCCTGTACTCCAGTTGATCTACTGGAACCTTCGCCTCGGTTC  
CGCAGCTGGCCGTTGCTGCAACTGCCATTGAGGTTTCGTGTTGCTGGAGGAGCAGGTTAT  
GTAAAGTCTTCATCAACGTCTCGTCTGTTCCGTGTTGAAATGGGAGCTTGCACGGGTCCG

>RXA01137-downstream  
TGATCTACAGGCCACGCAAACT

>RXA01140-upstream  
TATCCAACCTCCCGATTTTCAACGGGATTACGCTTGGGATGTTGATCGCATCCGAAGCCT  
TATAACCACTGTTCTTCGTGGTTTTCCAGTAGGTGTGCTG

>RXA01140

ATGGCACTAGACACCCGCGGCGAGGAAATGCGTTTCCGGCCACGCGCGCTGTCCGGCGCC  
CCAGATACGGGCAAGGATCCAGGTCTTTTGCTTCTCGACGGACAACAGCGCCTCACCACC  
CTTTATCATTGCTTCAGTGGCGATGGCTATGTAAATACGGTGGACTTCCGATCAAAGAAA  
GTGACCCGGAAGTTTTATATTGATGTTGCTAAGGCTGTTGAATCTCCGGTCATGTCCGAT  
GAGGCTATTTTTTCAGTCGACGAAACCGGCAAAATCATCTCCCACTTCGGTCCAGTGATC  
GACGGCGGCATCACCGATTAGAAAACAGCACTTGCTCATGGTTGCCCTTCCAGTTTCTGTG  
CTGCTGGATGATAACGGCACTGATTTCCTCTTTGACCTCGCCGATATGGCAGGAGAAGGC  
GCTCGGAACACGCGAAGCGCTTCCAATCACAATCGTTAAGACCTTAGTTAGTTACGAC  
ATCCCAATGATCCGACTGGATCGTGAAACCGCCAAGGGTGGAAATGGTTCCATCTTTGCT  
CAGGCCAATAGCTCTGGCTTGCAGATGGATGTCTTTGATTGCTCACCAGCGGTGTTTCGCA  
GCCGATGAATCGGTGGAGACCGAATTCCTACTGCGTGATGACTGGGTGCGGGTTGAACGA  
AACCTTCGCCAACACTCCGCACTTGATGGCATCGGCAGCACGGAGTTCCTCACCAGTA  
GCCCTGTTGGTCACTGCCCCGAAGGACATGCGTCTGGTTACCGTGAAGATATCTTGAAC  
TTGACG

>RXA01148-upstream

ATAGAACAAGGGTAGCCAAATTCCTTGAAACAGCGCGGGCCCCCGAATCCACAATGCGAA  
TCCACAATGTCACCTGAAGCCGTTAAAGTAGGTGATCATT

>RXA01148

ATGACCAGCCCAGTTGAAAACGTTAAGAAAAAGCCACGCCCATTGGCGCTGTCACCGTCG  
CGCGCCGGGGATTACCAGCAGTGTCCCCTGTTGTATCGCTTCCGCGCGATTGATCGCCTG  
CCAGAGCCTAAGACCGTCGCCCAGGTCAAAGGCACGTTGGTGCACGCTGTGTTGGAATAT  
ATGCACAAGTTGCCGCGTGAAGAACGCGAATATCCAGCCATGGTGAAGCAACTCAAGCCC  
ACCTGGGCGCAGATGTGTGAAGAAGACGCAGAGCTCAAAGAGCTTGTTCCAGAAGATGAG  
CTTTATGATTTCTCGTGGATTCCCGCACCTGCTGCGTGCGTACTTTGAAATGGAAAAT  
CCTCAAGGTTTCGACGCCACCGAATGCGAAATGTACGTGGACACTGTGCTGCCCAACGGC  
GTTCTGTTCTGTTGTTTATCGACCGTGTGGATACCGCCCCACCGGCCAAGTCCGAGTTA  
TCGACTACAAGACTGGCAAGAAACCAAGCCGAGTGGAGCCAGCAAGCGCAGTTCCAGA  
TGCTGTTCTATGCACTGGTCTACTGGCGCATGTTCAATGAAATCCCAGCTCAGCTTCGTT

>RXA01148-downstream

TAATGTACCTCAAAGTCAACGAT

>RXA01153

CCGTTTTTAAGCCCGATCGTTACTTCCACGCACGCGGTGGTGGCGTATTCCACCGCGCGT  
GGATTTGGTGAGCACCGGGTGCGTTGGGACTATGCGCAAGAGTCCCCACTGCGCGATACT  
CGTGGCTTTGATCTGCGCCGATACCACCAGGCCCTGTGGTGGATCCGCGACGCCATTGGT  
GTGGCCAACGTGTTGTGCCCAATGGTGCCAGGTTTTATGTGATCAGCGCACCCGGAA  
TACTCTCCCCAGAGGTACCAATGCGTGGGATGCCATGGTTTACGACGCCGCTGGTGAC  
CACACTCTTATGCAGGCGCTCTGATGTTGCGAGTTTACCAGCCAGAATAGGTCTGTG  
TTGGACGGCCATGATCCGTGTCCAGCTTTGAAAATCTACAAAAACAATGTGACGGTAAG  
GGTGCTAGCTACGGGTTCACGAGAATTACCTCTACTCACGTGAGACGGATTTTGATGTG  
CTGGCTCAGGCATTGATCCCATTTTTTGTGTGCCGGCAGGTCATCATCGGTGCCGGACGT  
GTG

>RXA01154

GAGGGCATTATCAACACCCGCGATGAACCACACACCGACGCTGATCACTGGGGTGCCTG  
CAGTGATCATCGGCGATGCCAACATGTGCGAGACTGCGAATTTCCCTCAAATTCGGCATG  
ACCTCCCTAGTGCTGGATGCCATTGAGGCTGGGGTGGATTTCTCTGAACTCAAGCTGAAG  
AACGCAGTGAGTGAAGTAGCAAAGGTCTCCCATGATCTTTCCCTTACCCACCAGCTGCGA  
TTGGCGGATGGTTCAGAGCTCACCGCTATTGATATTCTGCGCCGCTATTTGGACAAGGTG  
CAGCCGTTTGCAGAAACCCAGTGGAAACAGCGTGCTACTGCGCTGTGGGGTGAAGTGCTG  
GGGCTCCTGGAGAATGATCTGCTCTCCACCAGCCATCTCCTTGATTGGACTGCAAACTT  
GCCCTGATCAAGTCTTTTGAAGGCGCGTGGGCTGTCCATTAAACGATCCCAAGATGTACCTC  
ATTGACCTGCAGTACAGCGATATTGATCCACAGAAGAGTCTGTATCACGCACTGGTATCC  
AAGGGGCGGATGAACACTGTGCACTGCGCAGGACATTGCAGATGCAGCGGCCACTTCA  
CCG

>RXA01155-upstream

ACAGCTTGCTGGATGAAATCGACGGACTGTTGGAAAACAACGCCGAGGAATTCGTTTCGTT  
CCTATGTACAAAAGGGTGGCGAATAGTCACTGTGAGTACC

>RXA01155

GTGGAATCCGCATTGACCCGCAGGATCATGGGCATTGAAACGGAGTATGGCCTCACCTTT  
GTTGATGGTGATTCCAAAAAGCTTCGCCCAGATGAGATAGCTCGAAGGATGTTTCGTCCC  
ATCGTGGAGAAATATTCAGCTCTAATATCTTCATACCCAATGGTTCCCGTTGTATCTT  
GATGTGGGTTCCACCCGAGTACGCCACCGCCGAGTGTGATAATTTGACCCAGCTGATC  
AATTTTGA AAAAGCTGGCGATGTTATTCAGATCGCATGGCTGTAGATGCCGAAGAGTCG  
CTGGCGAAAGAAGACATTGCTGGGCAGGTGTACCTGTTTAAAAACAATGTCGATTCCGTG  
GGCAATTCTTATGGCTGCCACGAAAACCTACCTTGTGGGTCGCTCCATGCCGTTGAAGGCG  
TTGGGTAAAAGGCTGATGCCGTTTCTGATTACCCGCCAGCTCATCTGCGGCGCCGGCAGG  
ATCCATCACCCCAATCCTTTGGATAAAGGCGAATCCTTCCCCCTTGGGCTACTGCATATCC  
CAGCGCTCTGACCACGTGTGGGAGGGCGTATCAAGTGCCACCACTAGATCACGCCCCATT  
ATCAACACCCGTTAGTACGCCACATGCGGATTCCCATTTCTTACCGCAGGCTGCACGTGATT  
GTGGGTGATGCGCAACATGGCAGAGCCAGCATCGCGTTGAAGGTCGGCTCCACGTTGCTG  
GTTCTGGAAATGATTGAGGCAGATTTTCGGTTTGGCCAGCTTAGAGCTTGCCAATGATATT  
GCCTCAATTAGGGAAATCTCCCGCGATGCAACAGGATCCACACTGTTGTCCCTGAAAGAT  
GGCACCACCATGACTGCCTTGACATCCAGCAGGTGGTCTTTGAGCATGCCTCGAAGTGG  
TTGGAGCAGCGCCCCGAACAGAATTTTCTGGCACCTCCAACACAGAGATGGCCCGCGTG  
CTGGATCTGTGGGGTCGCATGTTGAAAGCGATTGAGTCCGGTGATTTTCAGCGAAGTGGAT  
ACAGAAATTGACTGGGTGATCAAAAAGAAGCTCATTTGATCGTTTCATTCAGCGCGGCAAC  
CTTGGGTTGGATGATCCAAAACCTTGCCCAAGTGGACTTGACTTATCACGATATTAGGCCA  
GGTAGAGGCCATATTTAGCGTGCTGCAAGCCGCGCATGATCAACCGGTGGACTACTGAT  
GAGGCGATTTTAGTGGTGATACCGCTCCTGATACAACACGTGCTCATTTGCGCGGG  
CGAATCCTTAAAGCGGCGGATACCTGTTGGAGTACCTGTGACTGTGCGATTGGATGCGTCAC  
AAGGTCAACCGACCGGAGCCACAATCGGTGGAATTGGGGGATCCT

>RXA01156-upstream

AAGAACTAAGAAATACCGATTTACGGCAGGAGA

>RXA01156

GTGAGTGTAGTGAACGCAAAGCAAACCCAAATTATGGGTGGCGGCGGACGTGACGAGGAC  
AACGCCGAGGATTCCGCACAGGCATCTGGACAGGTTTACAGTCAACACCGAAGGTGTGGAC  
AGCTTGCTGGATGAAATCGACGGACTGTTGGAAAACAACGCCGAGGAATTCGTTTCGTTCC  
TATGTACAAAAGGGTGGCGAA

>RXA01156-downstream

TAGTCACTGTGAGTACCGTGGAA

>RXA01158-upstream

TAGGACGTTCAAGGAATTGGCTGAATCAACAAGCGCCAAGGTGGTTAAGCGCCCTCGGCG  
AGTTATCTCAAAAAAGAAGAAGTCTCCTACGGGAGAG

>RXA01158

ATGTCCATTGTTGAGCACATCAAAGAGTTTCGACGCCGACTTCTTATCGCTCTGGCGGGC  
ATCCTCGTGGGCACCATTTATCGGCTTTATTTGGTACGATTTCTCATTTTGGCAGATCCCC  
ACTTTGGGCGAGCTGCTGAGGGATCCGTACTGTTCTCTGCCTGCTGAATCCCGCTGGGCC  
ATGAGCGACTCAGAGGAATGTCGACTGCTCGCAACCGGCCCGTTTGATCCATTTCATGCTT  
CGCCTTAAAGTAGCGGCGTTGGTGGGTATGGTTCTTGGCTCACCCGTGTGGCTGAGCCAG  
CTGTGGGGCTTTATCACCCACAGTTTGTATGAAGAATGAGCGCCGTTACACCGCAATCTTC  
GTCACGATTGCTGTTGTGCTGTTTGTGCGCGGTGCTGTTCTTGCCTACTTCGTGCTTGCA  
TATGGTTTGGAGTTCCCTCCTTACCATTGGTGGAGACACCCAGGCAGCGGCCCTGACTGGT  
GATAAGTACTTCGGATTCTTGCTCGCGTTGTTGGCGATTTTCGGCGTGAGCTTCGAAGTT  
CCACTGGTGATCGGCATGCTCAACATTGTGGGTATCTTGCCTTACGATGCCATTAAAGAT  
AAGCGACGCATGATCATGATTTTGTTCGTGTTTCGTGCTTTCATGACACCCGGCCAG  
GATCCTTTCACCATGTTGGTGTTGGCGCTTTCCTCACCGTTCTGGTAGAGCTTGCCCTG

CAGTTCTGTCGCTTCAACGACAAACGCCGGGACAAGAAGCGCCCAGAATGGCTTGATGGC  
GATGACCTCTCTGCATCACCCTGGATACCTTCTGCTGGTGGAGAAGATGCTCCAAGCCCA  
GTCGAAACCCAGAGGCGGTGGAGCCTTCGCGGATGCTGAACCCAAGTGGGGAGGCGTCG  
ATAAGCTATAAACCCGGGCGCGCCGACTTCGGTGACGTGCTC

>RXA01158-downstream  
TAGGGCCTAGCCAGGTACCCCTTA

>RXA01159-upstream  
CATCAATCAATGTGCAAGGGTTTCATTTCTGGAAATCGTGGTCACCCACATTCACCAGT  
CATGAACAAGCTTGTTAATGTGAATTTGGAGTAGACCAC

>RXA01159  
ATGTCCCTCGGACCATGGGAAATTGGAATCATTGTCTGCTGATCATCGTGCTGTTTCGGC  
GCGAAGAAGCTGCCTGATGCAGCTCGTTCCATCGGCCGTTCCATGCGCATCTTCAAGTCT  
GAAGTCAAAGAAATGAACAAGGACGGCGATACCCAGAACAACAGCAGCAGCCTCAGCAG  
CAGATTGCGCCCAACCAGATCGAGGCTCCTCAGCCAAACTTTGAGCAGCACTACCAGGGA  
CAGCAGGTTACAGCAGCCTCAGAACCCTCAGACCCCTGACTACCGTCAGAACTACGAGGAT  
CCAAACCGCACCTCT

>RXA01159-downstream  
TAAAGTTGGGCAGTTTGCATCTA

>RXA01160  
AAATCATCCAACAAAATCAGCGACCTTGCCCGCCAGCTTAATCTGTTGCCGTATTTACC  
AGGTATAAAGGCCGTACCGTCATGGAAGCAGCGCGGATCTTGGCCAACCCCTCCTCCCAA  
ATCATGGAAGACCTCAACAGATTATGGATGTGTGGTCTGCCAGGACTTCTTCCAGGTGAC  
TTGGTGGAGCTTGATCATTCCTTTAAGGAAGTAAAAATCCACAATGCTCAAGGCATGGAT  
AAACCCTTGCGCCTCACACCAACTGAAGCCGGTGTTTGTCTGCTGACACTTGAATCCCTG  
GAATCCCTCCCCGGTATTTGCGAAACAGGAAGCGGTGCTATCTGCTGCGAACAAGCTACGC  
GCCATCATGGGGGAGTATTCCTCGACTGTTTTCGACTCCACTGGAGAAGACCTCGATGCT  
GAAGTTCTAGAGATCATCCGCGACGCCATGGATTACACCAGCAGGTCAGTTTGAATAC  
CACTCGCACAGATCAGACAACACCAGCCTGAGGCAAGTCAGCCCTGCTCATATCTTACC  
CATGAAGGCGAAACCTACATCAAAGCCTGGGAAGAAGCTGTGAACCAATGGCGGACGTTT  
AGGCTTGATCGCATCCGAAGCATTGTGCTTCTTGACAGCAAAGCAGTGCACCCGGCGCGA  
GGGGTTTTCAGTATCCACGGACGATCCTTTTGAGTTTCGAAAATCTTCCGATATTGCCACG  
TTATTGCTGCGTGAGGACGCAATGTGGTTAGGCAATTACATGGCCATGGAGGTGGATGAA  
ACGGTGGAACCGATTTCGCGATAGCGACGGATTTCAGCTGGCACACAGTCCACTTTCCGCTG  
CTTTCTAGGGATTGGTTTCGTCGATTCGCGATTGGCCATGCTGAGCATTTGAAAGTAACT  
AGTCCCGAAGATCTTCGGAATGCATAAAGCAAAAGGCTTTTAGTGGTTTGTACAGCGTAT  
GATCATCACGTAGAG

>RXA01160-downstream  
TAACACCCAAGAGTAAGACGCAA

RXA01163-upstream  
ACCGTACCCACAGACACACCAGAATTAACAGAAACAGACTGAAAAACAACATCGCTCGAC  
ATGCGCGTAATCCTAACCCGCGCACACTAATGTGGCCGAT

>RXA01163  
ATGGGCTACACCAACCTCAACGACACACGGGTCTTGCGCGCCGGGTCATGTGATGCCTGG  
TGCGCGACGATGTCTCCGCTAGTGCAGCAGGGAAGTGAGGCAGTCTTTCGGCGCATCATG  
GGTCTCTCGCGGCGTCTGATCGGAAACCTGGCTTTGACGATGTCCACATTTTCGGCGCA  
GCTGTTCGAGTTCCCGGTCTAAACACGGCACGTTGGTCAATGCTGCACCCCTTGAAAGTT  
TTGGGCGCACGGGGCGAGCCCAACCCCGCGAGTTCGTACCGTTTGAATACATCACCGGT  
GATTCGCGAGGTCGAGCCATCACTGCGACCGGCGCTGTCTCTTTTCCACACGCCCCCTGG  
ACAACCGGCCCCGCTCCCGCGATCGCCATGGCTCCATCCACCCAAGGCGTCGCACAGCAC  
TGCGATCCCTCCACACCTGCGCCATCGGACTCAACGCATTCTATGACAAACCCCTTCGAC

GCAATCATTGCTTACGAACTCCCCGTCATCCTCTGGTTTCTAGCTCACGGACTTGACGTT  
GTGTTTCATCGATTACCCCCGCGACCCCGCAACCGCGTCCAATACTATTGCGATTCCATC  
GCTGCAGCTAAATCGCTTCTCGACGCCGTCCTCGCCTCCAGACAACTCGGCCTTTCACCG  
GAAGCACCGCTTGGCCTGTGGGGATTCTCCCAAGGAGGCGGCGCC

>RXA01165-upstream

AGACCACTCACATTGCACATCTGCAGCTGCCAGGAAGTCTCCACCCAACAGTTTTCTAGG  
TCACAGGGATCCATTAGCCATTTGGTCCTTGTCGAAAGGT

>RXA01165

ATGGTGGGGCATGTGCCTGCAGCAATAGCAATCCCATATTTTCATTATTGAGATCCTCGCC  
TTCATTGGTGTCTCATGTGGCTCGGTTTCGGCTGGGCTTTGGGTCTCCTCGTATTGTTT  
TTCGTGGTGGACTTCTTCTAGCCGGCGTGGAGCTTCGTTCGATTAGTAAGAGTGCCGCC  
ATTCATCAGGCTTCGGGCCAGGGAAGTGCAGGAGCGATCGCCGAAACATTGGGCTGACC  
GCAGCTGGTGGCATTTTGGTGGCCATGCCGGGGTTTGTGTCTTCGATTATCGGTTTGTG  
TTCATTTTGCACCAACCAGGGCGCTGTTCCGCAAGGTTTGGCCAAGCGCATGCGCAGT  
GCCATCGAGAACCTAGGTGTGCGTGGTTTGAAGCCGTTAATGGTTACCGCACCCAGGCA  
TCCTACGGAAACTTCGGAGCGGCATTCAATGGTGGTGCAGCAACAACCATCAAATGAGCCG  
ATCGTGATTGATGAAGACGAGATCCAAGCCTGGACTTCTGATCTCAAACCTGAAGATTTC  
ACCAAAGGTAAAGATGAATCCGACGGTGAGAAA

>RXA01165-downstream

TAAGTGACACTGTTTGTTCGGCT

>RXA01166

CTCACCGGAGTGATTGCCTACGCCATCGCGGGACTTGCAAGTGAACCTTCAGAGATGTTT  
GAGGAAATCATGTGCGGTGTTAAATGAACGCGGAGTCAGTGATGTGCTGAAAAATATCACC  
AGCTGCGCGGGAGGTTCTTGTGGCCAGTGGCTACTCGTCTTCCCGCGGGTGGACACAT  
CAGGGCACGCCGTGGCAGACATTCTGGACGATCTGCCACTTGTGTGCTGAGTTTGGG  
AAGCAAAAGCTGGGTGCTGTGGCGCCAGAAATCCCAAGTGTGTTGTGGGGCTCTAAAAAT  
GATGATGTCAATCCCATTTGATCCCATTAGGGAATTGCGTGATAGCTGGGCGGACAAGGGT  
ACGCCATTGACCTGGCATGAATCCCAAGCGCCGCGTGTGCCAGGACGCACAGGTCTCAAC  
CATTTCGGGGCCCTATTTTAGAAACCTGGAAGAGTACTCGGGATGGCTCATAGATCATCTT  
GTC

>RXA01166-downstream

TGAGTGCCGTTTTTAAAGGCTCGG

>RXA01167

CCTCGCCAGCTCGTGAAGTACAAGACCGCAGACGGGGAAATCTATGAGGTTCCCTTCGCT  
GATGATGCGGAAATCCCCGAGGAGTGGATGTGCAAGAACGGTAAGCTAGGCATCCTCATG  
GAAGGTGAGGGAGTCGAGTCCAAGCCGGTCAAGCCTCCACGTACTCACTGGGATATGTTG  
CGTGAGCGTTCGCTCAATTGAAGAGCTGGATGTGCTGCTGGAAGAGCGCATCGAGGCACTT  
CGTAAGCGTTCGTCGAATGCAGCGAACTGCTGAAGGCTCAGCAAGAGGCTGAAGAAGCA  
GAAAAGGCAGCTGAAGAGGTT

>RXA01167-downstream

TAATCTTCCTGCCTAAGTTAGAA

>RXA01169

ATCCCCGCTCTTCCTGGCTGTTTTTGTGGGTTTCAGATGCCCTTGGCTCAATCTCTTTCGGC  
CCATTTGTAGAAGCATTTTTCTCCTGATTCTCATTCACCTGTTGCTGCTGCGGGAAC  
CAGCAAGTGGCAAGAAAGTGGCAGGTAGGACGTACAATTATGGCTGCTGCAGAAGCAATC  
ATGGTGCCTTTAATGATGCTGACGTTGTTCGCTGTCATCGCATCGCAAGTGGAAGCTGTG  
AGTGGTCAATTCACCGATATCGCCACAGTAGTGCCACTATATGTCGCCTTTTGTATGGTG  
ATGATTCCAATTGGTGGCGGGATATCCAAACTCGGTGGCTTAGGTTTCAAAGAGCAACGA  
GCCATCGTTTTTAGCGGAGCAACCCGTAACCTTTGGTTCGTTTTACCTTTAGCGTTAGCA

CTTCCCGCAGGCCCTGGAAATAGCGGCCGTCGTAGTTGTCACTCAAACCCTCGTGGAAC TG  
ATTGGCATGGTTGTCTACGTGCGCATCATCCCTTTAATTTTCCATGAAAAGCAGACATAC  
AGGAACTTTTCAGGCATAGGGGAGTCA

>RXA01169-downstream  
TGAAACAGAACGGCAAGCTAAGG

>RXA01170-upstream  
TACAGGAACTTTTCAGGCATAGGGGAGTCATGAAACAGAACGGCAAGCTAAGGTGACATA  
GTCACTTAAACTAAACAAGAAGGGTGGAGGACCCAAGCAC

>RXA01170  
GTGAGTCTTTCAAACAAAGCTAAAGGAATCGTTGCAGTAATCATCGTCGCCCTGGATCGTC  
GCGATGGCTGGCATGGTTCGCATACGCGTCAAGCAATAATGCTGATAAGACATTTCCAAC T  
GCAGGTGCGCTAGAACAAACCGTCGCAGCATTTGATAGGCAAGGCCCTTCAGGTCTCTGCA  
GTGCGACTGGCAGACATCTACGGCGATGAATACGTCTCCGCGGCGATTCTGTGCGAAGGA  
ACTCCAACCGCAACACTCGAGCAGTCACTGGGCGTAGACCTGTCTGAGCTGAACCTGGAC  
GAGTCTGGTGTTCCTTCGGGCGTGTCTACTTTGGCTCTGTCCAATCAGGATGGGGAAGTT  
GTCTACGACAAGATTGATCGTGCCAACGTTGATCTCTGCGCAACGCCACTCAATGGTGCT  
TTCAGCGCTTATTCATTGATGCCAGTTGCCAAGGTTGGCGAGAACTCCTGGGCGATCGCC  
GCT

>RXA01170-downstream  
TAGGGTTTTAAGGGTCAATCCGC

>RXA01171-upstream  
GTAGAAATTTTCCATGCAGAGGAAAGCCGATAATGGGGCAGAACCCCTTCCCGCCAAAAT  
GACATAATGTACATTATCGGACAATTATCCATATCTGGCC

>RXA01171  
ATGTCGCAGGCCGCTGGTAAGTTTAAAGCCCATGACTTCAACGCTCGCCGAATCAACACTT  
ACATCCCTTAAAGAACTTGAGGATCCAAAGATCCCTTCCGTCAATGAACGCCACGGCGAT  
GATCACGCAGTGAACCTCACCAAGCTTCGCGCCGTTGCCAAAGAGCTGAAAAAGAACCAG  
CCGCTGGCTCGTGAGCTTTGGGCAACCGACGATACAGCCGCACGTTTGGTGGCGTTGCTT  
ATTTGCCGACCCAAGGAATTTGATCAGTCTGAACTCGACTCGATGATCCATGAGGCTCGC  
ACGCCGAAGGTTCTTGATTGGTTGATCAATTATGTGGTCAAGAAGAATCCTCATTGGAAC  
GATCTCCGTGTGCTCTGGCTTGAAGATCCCGCCGAGAAATGTTGCGGCCCGCCGGCTGGGCT  
CTCAACACTCATGCCGTTATCACAAGCCGGACGCATTGGACGATTCCGAAATCCTTGAC  
ACCATTGAAGCTCAGATGAAAAC TGCCGAGCCTCGCGTACAGTGGTCAATGAATGAATGT  
TTGGCGCAAATCGGCATCCATCGTCCAGAGCTTCGTGATCGTGCCATTGCCATTGGTGAG  
CGCCTGGAAGTTCTCAAAGATTATCCGACCCCTCCAAATTGCACCTCGCCTTTTGCTCCG  
ATTTGGATCGAAGAGATGGTTTCGCAGGAAAAAA

>RXA01171-downstream  
TAACCGACCTGTTCCCTATCTTT

>RXA01173-upstream  
AGATCTGTTTCTATGTATTAAAGATCACACCGAGTGGTGGAATTTCTCTCAAGTGATTAC  
CCACAATGGACTTTGTTGATACCCAATTCGAGAAAGGCCA

>RXA01173  
ATGCACGTGAGCACTCTTCCAAACAAGAACTGCGTACTCGCATTTTTCGCAGGCACCGCT  
GCCGTGCACTGTCACTTGGTGTTCGCTCTTGCTCAAACGCAGAAGATGCTGTGGATAGC  
GCAACAGATGCTGCCAACTCTGCAACCTCCGCGCGGGATCTGCAATTAACGATGCCACC  
GGCACTTCCAGCGCATCCACCACAGAGCCTTCCGGAACCTCTGGATCCGACTCCGGGTCT  
GACTCTGCTGGAGGAGACACCACTGAAGTAGAAAGCGCCGATGGGTCCACCATCAGCATC  
CCAAC TGCCGTGCTACCGCTGCAAATGCTGCAGGATTTCAGTACCCCGGAATCCGTGGAA  
GAAGGCCCGAATGGTGAGTCATTGGTGACGTTCCCTGAAGGCTACATTGTTAACTCTGCA



GAAGGTGGTGCACAAGCACTGGTCCGGCATGATCGGTGAAACCTGGATCGGCGAAGGCGGA  
CTATCCGCGGCAGTGGGTCTCCCAACTGGGCCTGAAGAAGCAACAACAAATGGTTGGACT  
CAACAGTTCACATCTGGAGTAATTAGCTGGCTTGATGATGGATCAGGACAGTTCGCAGCT  
TCTGTTGAACCTGCT

>RXA01173-downstream  
TAAGGGAATCTCACCTGGCCTCC

>RXA01174-upstream  
ATATCGCAACCGCTGTTAATGAAGAGGAAGAGGCTCGCGATATCGCGAAGCTGTGCCAGG  
AGATGGTGAATTAGCTCGGAATATTGAGAAGTTGAGGTA

>RXA01174  
ATGAGCAACATGCAGGGAAACGATTCCAAGAAATCTAGCGGCGCGAGTCGTGCGGAGAGC  
CCACTGATCAAGTTCCGGACATTGATTATCGTCATCTTTGTGATCTTGATCGTTGGTTTG  
GCATCTATTGCAGTGGGACCTGTCGTGTACCAGCTCATCATGGGACCTGGTGTGAAAACC  
GAAGGAATCCAGGCTGATGGCGCAGCACCTGCGTCCACCGACATGAACGGCACCTGGGAT  
GTTGCCCCAGGGAGTATTCCAAACACCACCTCAGCTGGATTACCTTCGCTGAGATCCTG  
CCAGGCGAAGAAAAGATCACTCCGGCTCAACCACTGGTGTCACTGGCGAAGTGGTCATC  
GAGGATAACTCCCTGATCTCTGGTCTGATTACCGTCAACATGACTCACATCACCACCGAT  
CAGGAAAAGCGCGACATCAACGTGCGCACATAAGCTCTTCCACACCGATCAGTACCCAGAA  
GCAACCTTTGAGGTTACCGATTCCGTTGATCTTTCTGCGCTCCCAGACACCGGATCCATT  
GCTCAGGTTGTGATCCCAGGCGAGTTGACCATCCACGGTGAAACCAAGGCTGTGGAGCCT  
ACCTTTGATGTACTTCGTACTGGTGACCAAGTTATCGTGGCTTCCGATATCGAAATCAAC  
CGCCTCGACTTCGGTGTAGAAACCCAGAGTTCATCGCCGCAAAGATCAATGAGACCGGC  
GAGATCAACGTCCGAATCGTATTGGAGAAA

>RXA01174-downstream  
TAAACCATGATGGCATCACGGAT

>RXA01176-upstream  
GAGCTGTGCACCTTGTGACCTTTTGTGACACTGCTCAATGCTTTACGGCTACGATGAACA  
ACAAACCGACGTTTTTCGACGCTGTGAAGGACTAATTGCTA

>RXA01176  
GTGCGTTATTTTTACGATACTGAGTTCATTGAAGATGGGCGCACGATCGAATTGGTCTCT  
ATTGGAATCGTCGCAGAAGACGGTCGCGAGTATTACGCAGTTAGCACACAGTTTGATTCC  
TCCAAGGCGAACGCTTGGGTGCGCGCCAACGTGTTGGACAAATTGCCTAATCCTTCCTCC  
AAAGTGTGGAAATCTGCAGACACTATAAAGCGCGAAGTTTATGAGTTTCTCACCTCCACC  
GGACCAACCCCTGAACTGTGGGCCTGGGTGGGCGCATATGACCACGTGTTGTTGGCAGAA  
ATGTGGGGCGATATGGCGGGGCTTCCTCGGGAGATCCCTCGTTTTACCCGCGAGCTTCGC  
CAGTATTGGGACATGGCTGGCCGCCAACGCTGCCAGAGCTGCCGAACGGCAACCACGAT  
GCGTTGATTGATGCGCGTCATAATTTAGCCAAGTTCAAAGTGTGCATGGCAGCGCTGCCT  
TTGGGTAAAAGGGATCGCGTCTCT

>RXA01176-downstream  
TAGTCGATCTGCTCCCATTCCAT

>RXA01177-upstream  
TGTTTCATCGTAGCCGTAAAGCATTGAGCAGTGTCACAAAAGGTCACAAGGTGCACAGCTC  
AGTTCCTTAAAAACCGCTGGATACGGATACACTATTTTTC

>RXA01177  
ATGCACGGTGAAAACTTGTGGATGGCACTGAGGGAAATCTCAGTCAATTCCAATGGCGC  
GATATGGCTACAAATCAGACGCTGAGAAAAGCACTGTTAGTGCTTTCTACCATCGCTCTA  
CTCTTGACTTTTATGGCCTTCAATTTTCAATGTTTCGGGCCATCGAGTCTTTTGTCTTCTC  
TTCCATATTGATACTGACGTGTACCGCGCCGGTGCTAATGCATTCTTGATGGCGAGAAAT  
CTGTATACCCAGGACTACCAAGTTGGTAGCATTCAACTTCCCTTCAGTACCCACCGATT

TCTGCTGCGCTGTTTGTTCCTTGGCAATCCTTGCAAGCAGTGTAGCCGGAATAGCATT  
 ACGCTTATTTCCACGGTGTGCTGTGGTGGAGCGTAGCTATCGTCTTGCGCCGAGTGCTC  
 AAGGGTCTCACGGATGCTGATTCCAGGTTTGTGTCTATTTGATTCTGCCTATGGCATTG  
 TCCACGGAACCTGTATTCCAGACCTGCAGTTTGGCCAGGTCAACATCATTTTGATGGCG  
 CTGGTTCTCATGGATACCTTACCAAAAAGCCCTGGTTGCCACGTGGTTTTGGATTGGT  
 TTGGCGGCATCCATCAAGCTGACCCCGCAGTCTTTGGCCTTACTTCCTAGTGAAGAAG  
 GACTGGAAGGGCGCTGGAGTAGCAATTGCTTCTGGCGTAGGTTTTTCCGCCTTGGCGCTT  
 ATCCTCTCACCTTCAAGTTCCAAGATTTACTGGACTGAAACACTCAACGACCCCTTCTCGC  
 ATCGGCAACCTATCTTATATTGCTAACCAATCTGTGCGTGGAACGCTCAGCCGAATGATG  
 CATGAACAGCAGGATCTCGTCGAAAAGCTTTGGCTTGTGGCAGTTGTCTTGTGCCTTGGC  
 GCTGTGCGCGTCGCCATGTGGCGCGTGGTACGCGCCGGCAACCCGTACGGCGCCGTCATG  
 CTCAACTCGTTGATTGCTCTGCTGTGCTCCCTGTTCATGGTCTCACCCTGGGTATGG  
 CTGATTCCAATCGCTATTGGTTTGGGGGCAAGTGCCTGGAACAGCGGCGGACTGCTCCA  
 GGAATTGCCGCGACGGCTGGAGTCTTGGCGCTTCTGACCACGATTCCGATGTTTCATCACA  
 ACATTTTGGAAATGCCATACGATTACAGTCTTACCCATTTTGGCCATTGATTCTGCAG  
 CCGTCGGGCAACGCGTATGTAGTAGTGGTCATCGCTATTTTGATCGTCGCGATTGTGAAT  
 CCAACAGTTTGGGCGAGTGGCAATAAAGCTGTTTCAGGCCAGGCAGAGAAGAAGTCCCTCC  
 CTTGCGTTGCTTGTGTTTTAGCGATTGCCATTTCTACCTCTTTGCCAATATTTGGTTT  
 AAGGGAACAATCAAAACAAAGCGCTCATTTACGTACCCACTGCAGACTATGGAAGGTGCG  
 GGTCTCACTGACTTCGGCGAGCTTATTTTGAATTCGCGGCTTCCCTCCAACCAGCTTGT  
 TCCCTCTGGATAATCGGCGCCCTCAACGCCATCGCATTTGGCTATTACCCTGTGGTTCCCTC  
 CTTACGCGTTTTGCTGGGAAGAAGAGCTCCTGGCTGATTTATCTCAGCACCGTGGCTGTT  
 GCGCTGATGATGTTCTCAGTGCAGGATGCCTTGCAGTTTGGTTCGCTGACTCTCGTTGCA  
 CTCGCATTGATCACTGTTGATGTGTGAGTGTGAGAGAGATTGGCCCGCGGGCTGCTC  
 ACAGGACTTGCAGCAGCCCTGTTTGGATGGCCAATTCTGATTGTTATCGGATTCCCTCATT  
 CACCGACGTTATGCAGCAACAATCACAACCACTGTCACCGCAGCTGTGCTGTGGATCTTA  
 GGAATTTCTGCTCAATCCAGACGCTTCAACCTCAACCTGCTGCGTCAATGGTTCAACGGG  
 CGCGATGGTCGGGACAATTTGTCCTTCTATGCTTTCTTGGCCAGGTGGGTGAGCAATCC  
 CCAGCA

>RXA01177-downstream  
 TGATGTTTCGTATGGTTCATCGTC

>RXA01178-upstream  
 TCAACCTCAACCTGCTGCGTCAATGGTTCAACGGGCGCGATGGTCGGGACAATTTGTCCT  
 TCTATGCTTTTCTTGGCAGGTGGGTGAGCAATCCCCAGC

>RXA01178  
 ATGATGTTTCGTATGGTTCATCGTCGCCCTAGGACTTGGTGCCTGGGCAATCCACCGCACC  
 TGGTCACATGGATTCAAGGACCTCTCCGTTGCACTGAGCATCGCACTACCAACCTTGGTG  
 CTCCCCATAGTGGAATCCACCACCTCGTGCTACTTCTTCCACTGATCGCAGTGTGCTT  
 CGTCAAGGACGCGTGGAATTTCCCTACCTCATCGGATTTATCTACCTAGTCTCATGGACT  
 CCGCAACACCTGTCCTACTCCACGGTATTCCCACTTAATGATCCAGCACCAAGAAGGGTAC  
 GTCGCCCCTTTGGATGGTATTTACTCGTTGAACCAATGGCGGTAGCACCGGCAGCTATA  
 ATCCTCGGAGCATTTATTGCCCTGTGCTGCAACCACACCTAAAACAAGTCAGCTCGTGCAG  
 GTCGACAAGTCAAGCGCGGAAAACACCAAG

>RXA01178-downstream  
 TAAGCCTTACAGTCCGACAGCCT

>RXA01184-upstream  
 TAAACACTTCTGAAACTACAGCTGACGTTGTGGGGAAGAACTATTAAAGGAAATAAAGC  
 GGCAATAGTGATGATGTCGCTGATATCTTTTTACGCCTTG

>RXA01184  
 ATGGGTTTGTGTTGGTTTCGGCATCTTTTTGGCTCTTGGGCTTGGGCAAGACCACATGGGC  
 ATCCTTGCTGGTGTGCTCCTCGGTCGGCATGGTGGCTTATTGCATTGCTGCGTTTATGTGG  
 CCGTCAGGTGAGGGGCGAGTGGATCCGACTGCATTTCCACCATGCCGCTATCGGCGAAG  
 CAATTATTGCCTGGATTGCTATCGGTACGCTCCTGCAGTCACGGGGGATTATTGCGGTG

ATTGTGACGGTGGCGACATCCATTATTGCTGCGGTGTTTTACCTGTTGGTTCGTGGCCG  
 ATGATCGTGTTTCATGATGGCGGTATCGCTGGTTACTACGTTGCTTTGGGTGAGTTGCTT  
 GGGCGTTGACCTCGGGTTCTTCTCTAGGGTGAGTAATGATCGCCGTACAGTTCTTACT  
 TCCGTTGTCTTCATGGTGTGTTGTTGGCTATAACATGCTGATTGGCGCGGATGGAATG  
 AGTCGAATCGATGCCATTGGGGCTTATACAAAGTGGACACCATTGGGGCGGGTGCAGGT  
 GCTATTGAGGCTTTTGTGCTGTTGGTTGTGGGGTGAGGCAGGCCTGTTAACATTGCTGGCT  
 TTTGTTTATGTTGCTGCTGGTTTCTGGTTATGGTCACAGCTGATTAATCGCGCGCTCACT  
 GCGCCGCTGGACCAAGGTGGGCAAGGGCAAAGCGCTAAAGACAGCGCCGTTGAAGGCAAG  
 AAGGTTCTCTTTCTGCCAGGTATTCCTTGGTCAGTTGGAGGTGCCATTTTCTCGAGGTCTG  
 CTGCGTTATATGTTTCAGGGACTCCAGGTTGTTGGGATCAATGATTGTGTTCCCGCTTCTT  
 GGCGTGAGCTTTTATTTCCAGAGCTTCACCGTTGAGTTTTCATGATCTATGTTGGGTTG  
 ATCATGATGGCAGTGTTCGCAGGATCCGTTGCTACCAATGATTTTGGCTATGACGGCCCT  
 TCGTTGTGGCTAAATATCGTTGCTGGTGTCAAAGCCCGAACGTTGTTGATGCCAGGCAC  
 TGGGCATCAATGCTGCCGGGAAGTGTGTCATTTGTGGTGTGTTATGATCATCACCATTGTG  
 CTCGCGGAGAATAAGACCACCGCTGTGCTGATCTGTTTTATTGGCCTGGGGATCTTTATC  
 TCCAGTGCGGCTGTAGCGTTGTTGGTCACCACATTTAATCCGTATCCGACTTCTAAGCCA  
 GGCACGAGTCCTTGGGGCGATCGAAGTGGCTATTCCGGTGCTGCGTTGTTGGGAGCATTT  
 GCCGCACTGTTACTGGGATGGATCCCGACGATTCCCTACTATCGCATTTGGGTATCTTTGGT  
 CTGTTTACCGATCAGATGTGGATGATCATCTCGCGGAGGTGCTGGCCATTATTCTCCCA  
 GTAGCTGTGTACATCGCGCTGTGCTAAGGTGTGATTTCGCAAGGTGGAGAAGGATCTTCCG  
 GAGATCTTCGACAAGGTGAAAACACGCTGAAA

>RXA01184-downstream  
 TAGAAAAATGCGGGGT

>RXA01186-upstream  
 TTGCTCATACAGCCATTGAACTCGTAGAATCACCGTTCCGCCACCCAAATCAGCCCAATA  
 AGTTCAACAATTACATAACATCTGAAAGAATAGGGACATT

>RXA01186  
 ATGGCTACACCTGTACCACTGGTTTTTAACGCACCTAAGCGTGGCATGCCCCCAACCCAC  
 TTTGCGGATCTTAATGATGAGGCTCGCATTTGAGGCTCTTAAAGAGCTCGGCTTGCCCCAA  
 TTCCGACTCAATCAGATCGCTCGACACTACTATGGTCGCTCGAGGCTGACCCACTCACT  
 ATGACGGACCTGCCTGAAGGTGCTCGTCAAGAAGTCAAGGATGCTCTTTTCCAACGTTG  
 ATGTCTCCTCTGCGCGTCTGTCGAAACCGATGACGATACAACCTCAGAAGACGTTATGGAAG  
 CTCCATGATGGCACTTTGCTTGAGTCTGTTCTCATGCGCTATTCAGATCGCTCCACGCTG  
 TGTATTTCTTCGCAGGCTGGTTGCGGCATGGCGTGCCCATTTCTGTGCAACTGGTCAGGGC  
 GGTTTGGACCGTAACCTTTCAATCGGTGAGATCGTGGATCAGGTTGTAATGCTGCTGCA  
 ACGATGCAGTCAGAGGGCGGTCGCTGTCTCAACATTGTGTTTCATGGGAATGGGCGAGCCT  
 CTCGCTAACTACAAGCGCTGGTGTGCGGCTGTTGCTCAGATCACGCAGCCAAGCCCTGCG  
 GGCTTCGGCATTTCCAGCGCAGTGTGACTGTCTCCACCGTGGGCCCTCGCTCCAGCTATC  
 AGGAAGCTTGCCGACGAAGAGATGTCCGTAACCTTTGGCAGTTTCTTGCACACTCCAGAC  
 GATGAGTTGCGTGACACTCTCGTGCCAGTCAACAATCGTTGGCCTGTCGCTGAGGTACTG  
 GACGCTGCTCGTTACTACGCAGATAAGTCTGGCCGTCGCGTCTCCATCGAGTATGCGCTC  
 ATTCGCGATGTGAATGACCAGGATTGGCGCGCAGATATGCTGGGCGAGAAGCTGCATAAG  
 GCTTTGGGCTCCCGTGTGCACGTCAACTTGATTCCATTGAACCCAACCTCCTGGTTCTAAG  
 TGGGATGCTGCACCAAGGCTCGTCAGGATGAGTTTGTGCGTCTGTGATCGCCAAGGGT  
 GTTCCATGCACTGTGCGTGATACCAAGGGACAAGAAATCGCTGCGGCTTGTGGACAGCTT  
 GCTGCGGAGGAATCTGCT

>RXA01186-downstream  
 TAAGCCCTCAAAGCTCAAAGCC

>RXA01187-upstream  
 CTATTCTTTTCAGATGTTATGTAATTGTTGAACTTATTGGGCTGATTGTTGGGTGGCGGAACG  
 GTGATTCTACGAGTTCAATGGCTGTATGAGCAACAGACCT

>RXA01187  
 GTGGATCCATTTGAGACCAACCCAAACGACCTTCCCACCGGTTTAGACCCAGCATACGAA

GGTAACAGTGAGTTAAACCCGCTTGGAGGAAAAAATATTCCCGACGAGCCTGAGGTGACT  
GCAAACACACCTGCAAGTCAAGAAGAACCTGCTTACTCGGAGCCAGAACTGCCGTTGAG  
TCGAAGCGTCAGGCGAAGCAGAACACAAAGAAGTCCGAACCTGTTGTGGCTCCAAAACAA  
ACACTTGCCGGTGGCACGTGGGTAGCTCTCATCGTAGGCGCACTTTTGCTAATCCTACTG  
TTGGTCTTCATCATGCAGAACCAAACCACCGTAGAGCTTAACCTTTTGGCGTGGACCTTC  
CAATTCAGCCGGAATCGGTTTCTTACTAGCAGCCATTACCGGTGCATTGATTATGGCG  
CTTGGTGGTGGCGTGCATGTTTGTAGTACCGTCGCAGT

>RXA01187-downstream  
TAAGAAAAATCCGT

>RXA01195-upstream  
GGTTTCGCGCCAGGCGACATTGTGAGTAGGATCGTCTAAAATCGTTTTCTTATCGCAGGA  
AGGACTCAAAAAGGCCGTGGAATATTTGACCTGGGGTTTG

>RXA01195  
GTGATTGTTGCAGTGTCGGCAGTTCTTCTTGCTGCCTGGCGGTTTTTCACCTTACGTTCT  
CGGGGAACCACTGTGATTCTGCGTGAGTTGCCACAAAGCGGTGTGCATGGCTGGCGCCAT  
GGATCATTTTCGCTACAACGGCAACGACTTGGAGTACTTCAAGCTGCGCTCTTTGTCTCCC  
ATGGCTGACCTTATTTTGAACCGCCTTTTCAGTAACCTTTGCTTGATCGTAGAGATCCAGCT  
GCTGATGAGGCGGTTTTTATGTCTCAAGGCTTAAAAATCTGCACATTAAATCCAAAAAT  
GATCAGATTGAATTAGCTTTTGGACGCCACGGGGAGATGGCGTTTACTGCCTGGTTGGAA  
GCAGCACCAGATGCGCGGGCGGAGCATTCATTGAATCCACGTGATTTCAACCGCTTTCGA  
GCCAGCAAAGACACCCGCAAAAACCGC

>RXA01195-downstream  
TAAGTAGACGTCATTGTTATGGT

>RXA01196-upstream  
GGGCGGAGCATTCATTGAATCCACGTGATTTCAACCGCTTTCGAGCCAGCAAAGACACCC  
GCAAAAACCGCTAAGTAGACGTCATTGTTATGGTGGGTGC

>RXA01196  
ATGCGTTTATGTCATCGCCGTTGCTCAGTTGATTATGTTGGCCGTTTGAAGCTCATCTT  
CCGTCCGCCGATCGCCTTTTGTATGGTTAAGGCGGATGGTTCTGTATCCATCCATGCCGAT  
GACCGTGCCATAAGCCACTGAACTGGATGACACCTCCATGTTCTTTAGTTGAAACTCCC  
ATCACTGATGAAGATGGTGAAGCAACAGGGGAAAGCCTGTGGGTGGTGGAAAACAAAAAG  
GGCGAGCAGCTTCGAATTACTGTGGAAGAAATTCATTCCGAACAAAACCTTCGATCTAGGC  
CAAGACCCAGGTTTGGTGAAGACGGAGTGGAAGATCATCTCCAAGAGCTTCTTGCAGAG  
CACATCACTACGTTGGGTGATGGGTACACATTGATTTCGTCGGGAGTATCCAACAGCTATT  
GGGCCTGTCGATATTTTGTGTCGCAACTCTGACGGCGAGACTGTCGCTGTGGAGATCAAG  
CGTCGTGGTGGCATCGACGGCGTTGAGCAGTTGACCAGGTATTTGGAATTGCTCAACCGT  
GATGAATTGCTCAAGCCTGTTTCATGGAGTGTTTGCAGCCCAGGAGATTAAGCCTCAGGCA  
AAGACTCTCGCGGAGGATCGTGGCATCAAGTGCGTGACGTTGGATTATCAAGCGCTTCGT  
GGCATTGAGTCCAATGAGCTGACATTGTTT

>RXA01196-downstream  
TAAGAACATGGGCCGAAAAATA

>RXA01197-upstream  
AGCAACAATCATATCTGCCACCCTACCTTGGGGTTGGCATGTGATGACTAGCTTGCCCAA  
TCCTCAATATTCCCCCACCTGCTATGCCTAAAATTAAGCC

>RXA01197  
ATGTCTACCGAACAGTCTTTGAATATCCCCCACGAATACGTCATCTGCCTCGATCATGTT  
GGCATCGCCGTCCCTGACCTCGAGGAAGCCATCGAATTTTACCGTTCCGCATTCGGCTGG  
GTAAACCACCACCAAGAAATCAATGAGGAACAAGGCATTTTCAGAGGCCATGATCGGCCCC  
AAAGACATTAAAAGCACAGAAGGCATGATTTCAGCTCATCGCGCCGCTCAACGAGGACTCC

ACAATCGCCAAATTCCTCGAAAAGAAAGGTCCCGGCATCCAGCAAATGTGCCTGCGCACC  
AACAACATCGATGCGCTCTCCGAGCACCTGCGCCGCCAAGGCGTGCGCCTGCTCTACCCC  
GAACCCAAAAACGGCACCGGCGGTGCCCGCATCAACTTCTTGACCCCCAAAGACGCGGGC  
GGCGTGCTGCTCGAGATCACGCAGCCTCAAAGC

>RXA01197-downstream  
TAATTGCTTATCGACGCTCCCAG

>RXA01198-upstream  
TTCGGTAGACATGGCTTAATTTTAGGCATAGCAGGTGGGGGAATATTGAGGATTGGGCAA  
GCTAGTCATCACATGCCAACCCCAAGGTAGGGTGGCAGAT

>RXA01198  
ATGATTGTTGCTTTTCTGTAGCCCCGACTGTTACTGATAATCCAGATGCTGAGATGGCC  
GATGCGGTCACGGAGGCGATTTCGAATCGTCCGCGCATCGGGTCTGCCTAATGAACTAAC  
GCGATGTTACGCTCATTTAGGGGGAGTGGGATGAGGTGATGGCGGTGATTAAGGAGGCC  
ACTGAGGCGATCTCTAGGGTATCTCCGCGTACATCGTTGGTAATTAAGGCTGATATTCGT  
CCGGGACACACTGGCCAATTGACGAGGAAGGTGGAGGCGGTGGAGGAACGCCTAGCTAGG  
GAT

>RXA01198-downstream  
TAGCTTTGTACTTAAACTTGTTG

>RXA01206-upstream  
CCGTGCCAGTGATGAAAAGCCGGCGAGCCGCCAAACTTGATTAAGTGATTGTCACTTTGG  
ATTGTCATATTGGGCGAATAAACCGGTAGGATTCCCCCTC

>RXA01206  
GTGAGCGCCGAAAATACCGAGAACACAGATTCCCCATTTGAAATCTCCGAGTTTGATGAT  
CACCGACGCCCCCTCCAGCGGGCCCTCAAATTCGGTTCCATCGCCCTAATTGTCTTCACC  
CTGATCTCCCTAGCGATCTGGGGTGCAACTCGTGCGGTACCCGGCGTATCAGCAGTTGTT  
ATCGGCGCAGCAGTTGGCGCAGGCTTTGTCTCTTAACGGCTCTCAGCGTCCTGTTTACA  
ACTAATTCCAACGTCACCACC

>RXA01207-upstream  
CTTCATGATCTCACCGGCAGAGCGGTTTTGTTACAGCGCGTAAACTGTGACTTTGAAAA  
ATTTTTGAACAATCCGTACACCAACTTCAGGAGAAAAACA

>RXA01207  
GTGAGCAGAATCTATGACTGTGCCGACCAAGACTCCCGTGCAGCAGGCCTAAAGGCGGCT  
GTGATGTCAGTCAAAGCCGGTCAGCTCGTTGTCTTCCCACGGATACCCTTTATGGACTC  
GGCTGCGACGCTTTCAACAACGAGGCAGTAGCCAACCTTCTGGCCACCAACACCGTGCC  
CCCGATATGCCCGTTCCAGTGCTCGTCCGCGAGCTGGGACACCATTCAAGGACTTGTGCAC  
TCCTATTCTGCGCAGGCAAAAGCGCTTGTGGAGGCGTTCTGGCCTGGTGACTGTCCATC  
ATCGTTCCGCGAGGACCAAGCCTTCCGTGGAACCTTGGCGATACCCGTGGCACCGTAATG  
CTGCGCATGCCACTGCACCCAGTTGCCATTGAATTGCTGCGCCAAACCGGACCAATGGCT  
GTCTCCTCCGCCAACATCTCCGGACATACTCCTCCAACCACCGTGCTGGAGGCTCGTCAG  
CAGCTCAACCAAAATGTCGCTGTCTACCTCGATGGTGGCGAATGCGCGCTGGCCACCCCT  
TCAACCATCGTGGATATTTAGGCCCCGACCAAAAGATTTTGCCTGAGGGTGCCATCAGC  
GCAGAACGCGTTGGCGAAGTACTTGGAGTGTCGGCAGAAAGCCTGCGC

>RXA01207-downstream  
TAAATGGGAGTCGGTTTTCGCGGG

>RXA01210  
GTATTCCCAGTCGGAATCCCTTTGTTGCTCTTTCTCATCGGAAATGGTGGGGCAGCAGAG  
TCCGCGAACTCCTTCGACTACTTCGTCATGTACACCCTGCTATTTGTGCAGTTCTACACG

GTGCTGTCCATGGCAACCACCCGCCGTGATGAACGTGTGCTGAAAAGGCTGCGCACGGGA  
 GAAGCCCGCGACATCGATATCATCGGTGCCATCTGTTTCCCCGGCGCGCTCCTCACACTG  
 ATCTTACACCGTGGTGATCATTCATTGCTCATGGTTTTGGGAGCTCCCGCGCCCATCAAC  
 CTTGTGCCCATTGTGTTTGCCGTACTGATCGGACTACTTCTTTGTAGTGCTCTTGCCCTTG  
 ATGACCAGCGGTTTACCCGAAACGCCGAAGCCGCACAGATGACCTCCATGCCCCGTGTTT  
 ATGCTTGGCGATGGGTGGACTTGGATCAATCCGCTTCGTATTGGGCGACAGCATTTGTGGCT  
 GATATCTTGGCCTACACCCCATTCGCCGCGATCAGTGACCTTGTCCAAATCGGCTGGGCT  
 GCGCCACCTTCGCCGACAGCGTTGGTGGAGTAGAGGCAGCAAACCTTCGCTGGAATTTTC  
 CAAGACATGCTCATACCACCTTGAATTCCTGGCAGCGTGGACAGCTGCAGCGGTGTGGGCG  
 CGGAACCGCTACATGCGCTGGGACTCGTACCGC

>RXA01210-downstream  
 TAAGCCTGCAGCCGACGGGATTA

>RXA01213-upstream  
 AACTCTGGCAACAACATGCGCCTTCACTCCCTCAAACAAATTTTCATAAACACCCACAT  
 CATATCAACCAACGGTGTAGTTCTTCTAAGCTTTCACCC

>RXA01213  
 ATGACAAATCCACAGAGGAGCGCAACGCACGCCGCCTCATTTGGGCCAACGGCCTGCAA  
 AACATCGGGCATCAAATCGTTGCCGCCAAAACAGTCCTGCCCTGGTTGCTGCAAGCCGCT  
 GGCGCGCCGGGCTTTTGTGCGCGCTTCTGGTTCCAATCCGCGAAGCCGGATCGATGCTG  
 CCGCAAGCTGCCATTACTGGCTGGGTGCTGAGGCAGACGTCGAGAAGCAAAGTCTGGGTG  
 ATTGGCTCGAACGGCCAGTTCTGCTCTCGGCGCTGGGTATCGGCGTGGCTGCGCTGTTTTG  
 CGTGGGTGGGCGCTGGGCATCACGGTGATCGTGCTGCTTGCGGCGCTGTCGCTGTTTTGA  
 TCGATGTGTTTCGATTGCATCGAAGGATGTTTCAGGGCAAGGTGATTTCCAAGGGCAAGCGT  
 GGGCTGGTAACGGGCCGCGACGGTGATTGGCGGTGTGATGGGCCTGGTTGCAGGCCTG  
 GCGATCGCTATTTTCTTGGGCTCGCATTCCTCCGACGAGGGTGCTGGCCGAGTGGTGATC  
 GCGAGCTCGTTTAGCTGGCTGTTTGCCCTCCATTGTTTTTCGCGCGCATCGAATACGCGAAG  
 CCAGCGACTCCAAAAACCGCGCTTCCGCAAACCCGTGGGTGCGTCGCTGCATCGCCGCA  
 TTAAGATGATAAAGCTTTTCGACGTTTCTGTTCTGTTTCGCTCAATGATGCTGGTGACA  
 GCACTCTCCACGGCTTTCATCGTCGCACTCGCCGCTGAATCCGGAACAGCATCGACTCC  
 TTGGGATTCTTCTCATCGCTCCGCTTGGCGTCCATGGTTGGTGGCCGAATCTCTGGA  
 ATCTGGTTCGGATCATTCCTCCAAAAACGTCATGGCGGGCGGTGCCCTATTCTGGTTCCATC  
 GTGTTAATCCTCGTGGTGCTCAGCTCCGCGTTTGCACCCGCGCAGATCAACACGCTGGTG  
 TTCCCGTTGAGTTTCTTCTCATCACCTTGGCCACACCGCCATCCGCGTGGCCCGCAAA  
 ACTTATGTAATGGACATGGCTGAAGGTGATCAGCGCACCCGCTATGTTGCCGACGCCAAC  
 AACTAATGGGTGTAGTTTGTCTATTGTTGGCGCATATCTGGCTTCATTGCAATTTTC  
 GGAAACGAAGCCGCACTGCTCTTCTTGGCGGAATTGGCCTGCTTGGAACCATTAGCGCC  
 CGTGGCCTCAAGGAAGTATCCGCCGGA

>RXA01213-downstream  
 TAGTTTTACAACCTTTTCCACCCA

>RXA01218-upstream  
 CTAAATATGCTAGCACGATGGCCAAACCTAATCCAAAAACCGGCAGTATACTGATTGGGG  
 TCACATTAGCCAAAAGGCACTTTGAGGAAGTGGAACCTCT

>RXA01218  
 ATGGCACGACTTCAGCACGACATGATTTTCATCAACCTACCAGTATCTGACCTTGACGCA  
 TCTAAGCGTTTTTATGCAGGTCTTGGCTTCAAAGAAAAACCGCTTTCAGTGATGAGCAC  
 ACTGCATCTTTTGGAGTTCAGTGACGCCATCGTGGTGATGCTTCTGGAAACCGCGCGCTTC  
 AGTGATTTCACTAAGCGCCCCATCGTGGAGAAGAACGGCTCCCGCGAAGTGCTCAACTGC  
 CTGTCTGTATGTTCCACCGAGGATGCGGATGAGTTCGTGCGTCGCGCCAGGAATTCGGA  
 GGCACGATCACCCGTGAGCTTGCAGCGGAAGGCCCATGTACGGCGGAGCTTTTGATGAT  
 CCAGATGGACACGGTTGGGAGCTGATGTACTTCGATCCAGAGGCACCTCGCTCAGATGATG  
 CCTGAGGGC

>RXA01218-downstream

TAAATATTCTTCAGGGCTTCTCG

>RXA01229-upstream

TAGCCCCGAAAGACGGCGAGGGTTGGCTCTGCTTCGTTGTGGGAAAAGTAGGCCCTTAAT  
AAGCTGTGCTTATAGGGTCTCCTGCACCGATAAAGGACTG

>RXA01229

ATGATCATCTCCACTAACACCGCTCACCCCTGCACGAACCGCACGTACCCAGCCACCAC  
AATCGTATGAATACTCTGCGTGCCGGTGTGCTGGGTGCTAATGACGGTATCGTCTCCATT  
GCTGCGCTACTGCTCGGTGTGATCGCCACCGGCGCCAGTGACACCGTCGTGTTTCGGCGCT  
GGTTTGGCCTCAACGATCGCGGGGGCGGTATCTATGGCTCTCGGTGAGTACGTCTCTGTCTC  
TCCTCACAGCGTGATACCGAACGGGTGCTCATCGCAAAGAAGCGAAGGAGCTGGCCGAA  
GACCCGACGGCCGAGCACGTGAGCTGTCGGAGATCCTACACTCCTACGGCATCTCCCT  
GAGACTGCGAACCAGGCGGCCACCGAGATCGGGCAGGGCGACGCTTGGGCGCCACCTT  
CAGCTCGAGCTCGGTATTGATAATGAGCAACTGACCAGCCCCCTTGGCCGCCGCTTCTCC  
TCGGCCGTGGCTTTCTGCTCGGAGCACTGCTGCCGATGGTGTGCGGTATTCATCGCCCCCT  
GCAGGCTGGGACGCCGGCGTGGTCTTCGTAGTCACGCTGCTGGTCTTGGCGGTGACCGGG  
TTCATCTCAGCCCAGATCTCGGGTACCTCCCCAATGCGCGCGTGCGGGCGCTTGGTGATC  
GGTGGTGCCCTCGGCCTGGCCCTAACCTACGGT

>RXA01231-upstream

CCTGGGACGTCTTCCCCGAGGCGTGGGAnGACATTGAAGGTTTACCTGGGCTTTCGTGCC  
CCAGGCATCGAGCACTTCACCCCCCTATGACGCCTTGCAA

>RXA01231

ATGCTGGGCTACACCTTCGTCATCTTTATCCTGGCGCCGTTTCTCATCCTCACCGGAATA  
GCGATGGCCCCGGCCATCCGGTCCCGCTTCCCGTGGTACGTCAAACCTTCGGCGGCCAC  
CAGGGTGCACGTTCCCTGCACCTTCATCGCCATGGTGTGATGACGGGCTTTGTCTCATG  
CACnTTCGGCCTGGTTTTTTGGTCCATGGCGACTACAACATGGTCCACATGGTCTTCGGC  
GATATGAACACTGACCGTGCGGCGCAGGCCTACATCATCGTGATCACCACCATCGTCAnT  
GGTGGTGTTKTCTGRATCGKGTCTAGTATATTKGTMRCTGGCTKACCGRGMCCGCGCCM  
WGCGGTTYACCGCCAGCWTATCKGAGWTMGGWCGCAAAATCTTNNCTCAWCCGGCTGCG  
TCCCCGGATGAGCAGGCAGAnnAnCACCTACACGGACAAGGACATCTCGCAGTTCCACTG  
GACCAATGGCCTGCCGCCGACCGA

>RXA01231-downstream

TGATGAATCCCCGAGTGGATCG

>RXA01234-upstream

AGAAACAATAGCCAGACCCAGAAGAGCAGACTGGAGAGCTTCGAGGATTTAGTGCTCCTG  
TGCATTTATTCGGGTCACTTCAACGTTGAAAAGCATAGGA

>RXA01234

ATGTGGAAGTTCATGAAGACTCAATACGTATGTACCACTTATTTTCATCGCTGCACCCGAG  
GATGAAGACGAGGCGTACCAAACCTATCGCAGCCGAATGAACCTTTTGGCAGCATTGAAC  
GGCGCTGACGTAGTTTCAGTGGCAGATGGCCTACGGATGGAAGTAGACCAGGATATTTGG  
GGAAGCCTTGCTGAGCAGTATCAGATTGAGCAAGAAGGCCTGTATCCCACTGGTCACAAC  
TTGTACTTTGTGTGTCACCGTGGTGAACCTAGATGATTCAGATGAGGTTTATGACCGAACA  
ATGGAGCATCTGATTATGGATGACCCTTATGTGCGAGTGGATCGTTTCCCAAGCACTGTC  
CATGCCAGCACCCAGATCATGTTG

>RXA01234-downstream

TAGAAAAAGAAAAAGCACCAACC

>RXA01237-upstream

AAACCAAAAATCACGACGCATTAAGTAACAGAGACTTAAATTAAGAACTCCGAACAACAA  
CTTCGGATTGTTTTTCATTTTTTGGAGATGAAAGAGCTTTTCA

>RXA01237

ATGAACGTACAGTTTGAATCAGACATGGCCGTCCAACCAGGAAACACCATGGAAGCTACC  
GTCACCGACATTTCGTGATGCCAAGCGTAAAACAACCCAGCTTGATTACAGTAACGCCGTTT  
AAGAAGAATTGCCCCGAGCCGCACCTTGCTCGACACCATCAGTGACAAGTGGGCGGTGCTG  
ATCCTGCTCAGCATGGAAAATGGTCCACAGCGCAATGGTGAAATCAAAGATCAGGTCCAA  
GGAATTACCCCCAAGATGCTCAGCCAGCGTCTTGGAGTGTGGTGGAAGACGGACTGGTC  
ACTCGCACCTCCCACGCAGTTGTGCCGCCCTCGTGTGGATTATCAGCTCACCGATCTGGGT  
GCTTCTGTGATTGAGCCTTGCCGTGCGATGTATTCCTGGGCAGTGGAGAACATTAAGCAA  
GTGGAGGCCTACCGCTCAGCA

>RXA01237-downstream

TAAGAACTTGGCAAACCTCAC

>RXA01246-upstream

GGGAAGGAGGAGAAGGCTGCTGTGAGCTCTGCAGCCCCGTCCGCTGACTTTCATGCTT  
CATGGACTCCCCGATACACAACCTCCGAAAGGGAACCCCC

>RXA01246

ATGAAGCGCACTATCACCATCGCCGCTCTCGCCTTGACCTCCACCCTGGTTTTGTCCGCC  
TGCGCAGATAAAGTGGAGGAGAAAACACCGACACCACGACCATCGCCACTACGTCCGCC  
CCCACACCACCGAAACGACCGGGGCCACCACGGATCCTGAGACAGAGACGGGGGCGGCC  
GGAGAGGTCTCCGCCGAGCACAATGATGCGGACATCATGTTCCGCGCAGATGATGATCCCG  
CATCACCACAGGCGCTGGAGATGAGTGAAATCCTCCTGGCCAAGGACGATATCCCGGCC  
GAGGTCATCGAGTTACCCAGGGTGTATCGATGCCCAGGGCCCCGAGATCGACCGGATG  
AATACCATGCTCGAGACCTGGGAAGAAGATCCGGTCACCGGTGATATGGGTGAGATGGAC  
CATGGCGGGATGAGTGGAATGATGAGCGAGGAGGACATGACAGCCCTCGAGGACGCCAG  
GGCACCAGGCTGCCCCGGCTCTACCTTGAGCAGATGACCGCCACCATGAGGGCGCGGTC  
GATATGGCCCGGATGAGGTCACTGATGGCCAGAACCCGACGGCCATCGCTCTGGCTGAG  
CAGGTCATTGAAGATCAGGAGGCCGAGATCGCCGAGATT

>RXA01249-upstream

GAATTGACGTGGAACCGAGCAGCGATCGCAGCCCGCCGCCCTTACCCTCGCCCTCACGGG  
GTGTTCCGGCCGCCGACCCGGAACCCACCGCCGACGGGACG

>RXA01249

GTGTCCCAGGATACATTCTGACTACCCATGGCCTGGCCGCCATGGACGCGGTGGAGATC  
ATTGATCACCTCGACCGGCAGAAGGTCACTGAGCGTCCACGGATCTGATCGCCTCAGTG  
CGTGCCGATGAAGTGTCTCTCGAGCGATGACCAGGAAGTCGTGGTCGATCTTCCCGAC  
AATCAGACGTATGTCTCGATCGCACCCCTACCTCAACTCCACCCACGACTGCTTCTACCAC  
AGCCTCACGACCTGCCTGGGGGATCTCGACAATGAGGATATCCATGTCATGATCACCGAT

>RXA01251-upstream

TGTAAGCCGAGAGCGAACCTGCCAAAAGTAAGGGGCGGGTTCGCGGTGACGTCCGTAGGA  
TCGAGCGAAGAAACCAACAACTTCTTAGGAGCCATTCTC

>RXA01251

ATGACCCAGCCAGATATGTCCCAGATCCTCGCCCCAAGCTCAGCAGATGCAGGCTCAACTA  
CAGGCCGCTCAGCAGGAAATCCTGGCAACCACCGTTGTCCGAAATGCAGGAAACGGGCTG  
GTTACCGTCACTATGGCCGGCAACGGCGAGGTCTTCGAGTGACCGTTGACCCAAAGGTC  
GTTGACCCCTGAAGATGTGCAACCCCTACAGGACCTTCTGCTCGGTGCATTCAAGGATGCC  
CATAACAAGGTCGCAACGTTGTGTAAGAGAAGATGGGCCCACTATCCCAGGGCATGGGT  
GGCCTCTTC

>RXA01251-downstream

TAATTAGTTGCTAAACGCAGGGC



>RXA01263-upstream

AGTGGCCTTTGGAGTTATTTTGTATGACGGTATCGGCGACTGCTGGGATCCTCCTCTTTTT  
ATCTCCAAATAGAAGCCAAGCTGCGCCACCCCAATTTAGT

>RXA01263

TTGACCCCGTATGATCCAACCGCTGTAAATAAGGAGTCGGAAAAAGAAGCAGCAAAGAAT  
CTGTTTGGCGCTGAGGCGTTGACAGTGGATCCGGATGCCGGTGAGGTTGTTGATCGAGTA  
GATAATTTTTTATCCGACGACTGCTAAGGCAAAACGAGATTACCCAAGTAACATGCAGCG  
GGTTGTACCAAGAAGTCAATGAGACTAGTCTGAGTCATGTGTTTATGGTGATAAAAAAT  
TCTGATTTTTTCTGTAGCACTTGTGCGGTGACTCCCACGCTGGTCATTGGCTTCCTGCCTTG  
GAACCAATTGCTGAAGCACAGGGGTGGAGATTGGAAGTTTATACAAAGTCACAGTGTCCA  
CTCATAAGCACTGCGATCAAACCTTGGTGAACTTTTTTATGCAGAATGCTATGAGTGGAAT  
GAAAAATTACTTGCTAAGCTAAGTGGACCTTCTGCACCAAATCATGTGATTGTAAGTAGC  
CAACGTTACGCTTCTGCAAATCCGTTAATCGATAGTGTGCGACGGGAACCGTTTCCGAA  
GGATATGAAATGGCATGGAATTCATTAAAGATGCAGGTGTTTCTATTTCTGTACTTCTT  
GATACTCCTCGGCCCGCAAATTGATATCCAGAATGTGTAGCATCAAACCGCGATAATCTC  
TCAGAATGTTTCACTTACCAGGAGCGTTGCGCTTGGGACTGAAGCTCATCCTCAGCAAAAA  
ACTGCAGCTCAAAATATAGACGTGCCTGTATTGGATTGAGTAATTGGATTGTCCGGAA  
GAATATTGCTCCGCTGTTATCGGAAATGTTTTGGTATACAGGGATTACATCATTTGACC  
GCTACGTATGCTCGTAGTCTCTCTAGCGCATTATGGAATGAGTTGGTTGCCTCAAATGGT  
GAGCCTTTTAAAG

>RXA01263-downstream

TAAGAGGTAGTTGTTCAAGTAGC

>RXA01266-upstream

GATTGTGAAGTTTTATATCTGTTCATATTCTGGTGATTTTCGCCCTGCTCATGAAGTGCGG  
GACGAGCAATGGCCCGATATAGATTTAGTAAGGAACTAAA

>RXA01266

ATGCCAAAAGTAAGTGTGGTTACTGGTTTTTATAACCGCTGTGAGCATTTAGAACGAACC  
ATTGAGTCTATTCTTAACCAAACCTTATAGCGATTTTGAATTAATTGTTTTTGATGATGCA  
TCGACAGATGGAACAGCTTCACGATTGTTAGAGTTAAAAGAAAAATATGATGATCCGCGT  
TTCCGATTTATCATTCATGAAGAGAATAAAGGTTTCGTAAAAGGGTTATCAGAAGCAATT  
TCTGGAGCTAAAGGGCAGTATATTGCAGTCCAGGGATCAGGCGATGTATCTCTTCCCTCGC  
CGTTTAGAGCTTCAGGTAGAGTTTCTAGACGCGAATCCTTCGGTAGGTGCTGTGGGTGGT  
GCTATCTATAATATTCAAGAAGATACGGGAACACGCAACCCACAGAGATTTGAAAAGCCA  
ATTGCTACATTCGATGATTTATTGACATCTAATCCGTTCACTCACGGAGAAGTGATGTAT  
CGCTTAGACCTTTATAAGAGTATAGGTGGGTATCGAAGTGGCTTTACTTTTGCTCAAGAT  
CGTGATTTTATGGTTGAGGATGGCGAAAAAAGCAGATCTGGGTATCATTCCAGATTTTCTT  
TATCACCGTTACACACTTTTAGATGGTGTCTCTTTCGTCCCGGATAAACTATACGTCAG  
CGATGCTTTTTCAGAAGCTGCGGTGCGACTGGCATTAATGCCAGAAGAGGAAGGAGCTTTA  
GCCTACTCTAGGCTGGAAGCTGAAGGGCCTACTGCCGTAGTTCCTATCGCTGATAGAGCT  
GTTTCAGAAATTTGTCCCTAAAGCGGCTATTCGCTTATGTCTATATGGTGCTCCGGAACT  
GGTTTACACATGGCTCGAGACTATATCCAGAACCCTCTGCGCCGTACCATAGTTGTAGTT  
TTGATCAGCATCTATTCGTCTAGATTAATTAAGCCTCTTCAAGATATTCTATATAAGTCT  
ATTTTTAAGGGGGTCTCGATTTCTAAACCTATTAAGAGTTCACTCGTGAAGTTTACAAGA  
AGAAATCAAGGGAAG

>RXA01266-downstream

TAGCGAAAAACCGCATCTACCAA

>RXA01267-upstream

TGCTAGT'TTTAAAGAGGCGTTGAGGGGTAGTATCGCGTAAGTTTATTAGTGGTTAGCGTA  
GATTTTTTCAATTAAGATGTTTCTGAAAGGTATTTAGAT

>RXA01267

ATGTATGCAGAAATTAATGGCGGTTTTATTCCAGAGGGCACCGTGCGGGTAAGCGGCGCA

AAAACTCTGCTACTAGACTTCTCGCGGCGGCACTGCTAACCGATGAGGTGGTGCATCTT  
GGTAATTTCCCAACCAAGCTTGTGGATGTTGAACATAAAATTCGCTTTATTGAAGAGCTT  
GGCGGAAAAGTGCATGTCGACCATGATGAGCAAATTTTAGTAGTTGATGCTAAGGATCTT  
GCAGCGCGAGAAATGACTACTGATGAAGTGAATATTCGATTCGAACTACTTATCTCCTA  
GCAGCAGCGCAGATTGGGCGTGGGGAAATTGCTCGAGTTCCTTTTCTGGGGGGTGTGCT  
ATTGGAGGAGGTCTGCTGGCGGACGAGGATATGATCTTCATCTTATGGTCTGGGAACAG  
CTAGGTTGTAAATTTCTTGAAAAAGATGATCACATTGAAGTAACTGCACCCAGGGCTTT  
ATCGGGGGAGTTATTGACTTTCTTCTACTGTGGGAGGCACTGAAAACGCGTTACTA  
TGCGCAAGTATTGCTTCAGGGGATACTAAAATTGCCAATGCTTATATTACCCCTGAGATA  
ACTGATCTTATTGAACCTTCTGCGACGTATGGGTGCGGAGATCACTGTCTACGGTACCAGC  
CGTATTTCATGTAAAGGTCGAGCAGGTCTTTTGCAGGGCGCATATATGGACGTAATGCCG  
GATCGTATTGAGGCATTGACGTGGATCGTGTATGGAATTATTTTCAGGCGGAAGGATTACC  
GTGCAAGGTGTTCCATTTAGCTCGATGGAAGTTCCTTTTATCCACCTTGAGAAGGCTGGA  
GTGGATCTTTTCCGTAATTCAAGTTCGATATATATTACACCAGAATGCTTGCCTTCAGGC  
TCAGTTCAGCCATTGAGCTAGCGTGTGGAACACCCCGAGTAATTTTCGGACATGCAG  
GCACCTTTTGTCTTTTAGGATTAAAAGGTGCAGGAACCTTCACGCGTCTATGACTATCGA  
TACCCAGAAAGAATTGCATTTGTTGAGGAATTGACAAATCTAGTTTCGGGCGACAAATTA  
AGTGCAGAGGCTGGCAAGATCACTATCCAGGGAGATGCTACTTTCCGGCCAGGATATGCG  
AACTCAACTGATCTACGTGGTCTATGGCTGTTGTTTTCAGCGCGCTTTGCGCTGATGGA  
AAGTCCACGATTAATAACGTCCATATGGCGTTACGTGGGTACAACGAGTTGGATAAAAAA  
CTTCGTTTACTTGGTGGGATTAACTATCAGAGAAGGCGAAGTTCCTTCACCT

>RXA01267-downstream  
TAAGAACGAAAGTTTACATTGA

>RXA01268-upstream  
TACCGATGTTAAATCATTATTTAATTGGGTGCTATTGCTTAGGAAAATTCGTCCAAGAGT  
GCTGATAGTTGGAACCTCGAAAGCTTCATTGCTGGGAGTC

>RXA01268  
GTGGCAGCACGAATTGCTCGAGTGCCACGAATTGTCTATGTGGCACATGGGCTGCGCTCT  
GAAACTGTTTTAGGCTTAAAAAAGAAGATTCTAGTGTTTTTGGAAATATTTGACCCAGTTG  
TTTGCACATCAAACCTTTGGCTGTAAGTCATTCTCTGAAGAAAGCAATTGAAGATGCGCAC  
CCTCGCTTTTAAAGGAAGAGTGAAGTCTTAGGTTATGGCAGTATGAATGGAGTTGAGCTT  
GATCGCTTTAGAGTTCCATCCCTTGAAGAGAAATTATCTGCTCGTAATGCTTTAAACCTG  
CCTAGTAAATCTGTCTATTGTTGGTTTTGTGCGGACAGAAATAAAGATAAGGGAGGAGAT  
CTTCTCGCTGCTCTTACAAAACATGAGGCTTTTACCCGATTGCGACTGCATCTCTTAATT  
ATTGGTGAATTGGAAGACGATGACTTGCGAGAAGCATTCATTAAATTAGTTAATGAAGGG  
CAGGTTACGATTACAGGATGGATTGATTTCCCTGAAGAACCATTAGCTGCAGTTGATGTT  
TTGCTTCACCCAACTCAGCGAGAAGGTTTAGGTATGTCTTTGCTGGAAGCTCAGGCTATG  
GGAGTGCTGTATTGACGAATGCTGTGACTGGAACAGTTGATGCAGTAACAAGTGGAGAA  
GGTGGCTTTTTTGCCGATGACGATTCTGTTGAGTCTGGGTTTCTAAGATTGATTTATTA  
GTTTCCGATCCTAAGTTAAGAGACCGGATGGGACGTGCTGGTCGCCAGTTTGTGTCAGCT  
CGTTTCAATCGTGATGATGTCGACGCTCGTTTCAGTCATTTTCGTGGAACAATTCAAAAAA

>RXA01268-downstream  
TAGGGCTCATTCAATTTCAATAT

>RXA01271-upstream  
GTGAATCCGATGCCGGACAGATCGCAGCAACTCAATTTGGAGATTTCAGTTTTAGCCTGGG  
TTGGCGAAACCAATTTATTTCAAAAGATGGTGGACAAAC

>RXA01271  
ATGGCAATAAGCATTGGTAAAGCAGGACAGAACTTAAAGGGTCAGTGCCTATCGGAAAA  
GTCCTTTTTCTCATTGATGCCCTTGCTGGATTTCTGCACTATTTATCGGTGTGGTTTTG  
CGGTATGAATTCAATCTGAGTTCTATCAACTGGAGTGCCTTTGCATGGTTCCGGCTTGCT  
GCAGTTATTTTGCAGTTTGTCTCGGACTTTCTCTCCATCTTTACCGCAAGGGATTACGT  
CACCTTTTCGGTAGCTTCGAAGATACACTAAACGTTTCTATCTCGGTCAATTGTTGTCGGT  
GTTGTCCTTTGGATCGCCTCACTATTTGTTGGTCAGCGTTGGAAAATCTCACGCGGTGTC

ATGCTGCTAGTTATCCCGCTTGCTCTCGTATTCGTATTGGCAGTGCGTTATCTCGCGCGT  
 ATGCGAGTTGAGCGTTTTTCGTGCTCCGGCTGCGGATTCCACACCAGCATTGATTCTTGGT  
 GGTGGATACATCGGTACCAACCTGATCCAGTGGATGATGTCCGATCCTAAGTCGCCTTTC  
 CGCCAGTCGGCGTTATTGATGATAACCTGAATTAGCATGCCAACCGGTACGTGGTGTG  
 CCGGTTCTTGGCAAGTTTGATGATATCGCCCAAGTTGCATCAGACACTGGCGCAGAACCTT  
 CTTATCGTTGCTATTGGTGATGCCGACTCTGCACTTTTAAGGCGTGTCCAAGATACCGCT  
 AATAAAAAATGGTCTTTCAGTAAAGGTAATGCCGGCTATTGACCGCGTCTTCTAAGGGC  
 GTTCGTGGAAACGATTTGCGTGATCTCTCTATTGAAGATTGCTTGGACGTCAACCTGTT  
 GAAACCAATGTTTTAGAAATTACTGGCTATCTAACAGGTAAGCGTGTCTTGTACCGGT  
 GCAGGTGGGTCAATTGGTTCCAGCTATGTACGGAATTGCCAAATACGGACCTGCTGAG  
 CTTATGATGCTTGATCGCGATGAGACTGGTTTTGCAGCAGGTTCTGATTAACGTTGCTGGT  
 AACGGTTTGTGGATACGGATGCTGTGGTTCTTGCAGATATCCGCGAAGCAGACGCGATG  
 AAAGAGATTTTTCTCAAGCGTAAACCAGAAGTTGTCTTCCATGCAGCAGCATTAAGCAC  
 TTGCCAATGCTGGAGCAGTATCCAGATGAGGGCTGGAAAACAAACGTTCTAGGAACTCTT  
 AACGTTCTTGTGCGCAGAGCTGTTGGTGTGAGACTTTCGTCATATTTCCACCGAT  
 AAGCAGCTAATCCAACCAGCGTCTTAGGGCACTCAAAGCGAGTCGCTGAAAAGCTGACT  
 GCCTGGTATGGACAGAATTCCACCAGCAAGTACCTATCGGTTGATTGGAAACGTCATT  
 GGTAGCCGTGGATCGATGCTCCCGACTTTCACCAGGCTAATCATGGAAGATAAACCGCTA  
 ACAGTGACGCACCCGGATGTCAGTGGTTCTTCATGACAATTCCTGAAGCTTGCCAATTG  
 GTCTGCAAGCCGGTGGTATTGGACGTTCCGGCGAGGTTCTCATCCTTGACATGGGTGAG  
 CCTGTAAGCATCCTTGAAATTGCACAGCGCATGATCGCAATGTCCGGTAAAGATATTGAC  
 ATCGTGTTACCCGGCCTTCGCGAGGGCGAAAAGATGCACGAAGAGCTGGTTGGTGATGGT  
 GAAACCGAAGATCGTCCATTCCACTCAAAGATTTGCGATGCACATGCAGAAAGCCTCGCT  
 CCTAATAATCTCGATAGAGATCGATTTATGCAACGTGCTGGAAAACCTAGCTTCAACAGAT  
 TCGGAGATCATC

>RXA01271-downstream  
 TAAATGACTAATGAACGAATTTT

>RXA01273-upstream  
 GACCTATTACAGCGCTGGATTTTTCTGGCATTCTTGGCAGTCAGTGAGTTGCTAACGT  
 TCTATTGGTTAAAAATTGATCTGCAAGAGGACTGCAAAAT

>RXA01273  
 ATGGAATTAAGGGAATACGCGACAATCCTGATGAAGAATTGGGTGTTGATCGTTATCGCA  
 TCCATTCTTGGAATTGCAGCGGGCGCTGGTTTTTCCCTTCTAGCTACACCGGAGTATCAG  
 TCACGTACTCAGTTGTATGTATCGGTGCGGTGCGGGGCTGGGACAACCTCTGACATGGTT  
 CAGGGTGCTAACTTTTCGCGTCAGATTGTGAATAGTTATGTTGATGTCATTAAAGACGGGT  
 GTTGTCTTAGAGCCGGTGTGTGATGAGCTTGGTCTGGAGTTGACGGCTAACCAAGTTGAGT  
 TCTCATATCAGTGCGGCTTCTCCTGCTGATACATGCGTTGATCAACATCACTGCTTCTAGT  
 CCTTCTCCTCAGCAGGCGGTGAGATCGCAATGCAGTGGGGGAGAGTTTCAAGAATGTG  
 ATTCAGACTGAATTGGAACCAGACTCCGGCGATGGCATGAGCCCGATTAACTGACTACT  
 ACTCAGGTGGCTCTGGAACCATCTTCTCCGGTCAGTCCATATGTGATGATGAATATCCTC  
 CTCGGCCTACTTGTAGGTCTTGCAATAGGTGTTGGTATTGCAGTGCTTCGCGCGGCTTTG  
 GATACTCGTATTCAATTCCTTGCGCGATATTGAAGAGGTTACTGATAAGCCACTTTTGGGC  
 GGAATCATTGCGGATTCTGAAGTTGAGAAGCACCCGTTGATCATTAAGCACAAAGCCGCAT  
 AGTCTATTGCGGAGTCCCTTTCGTGCGTTACGTACTAACCTGCAGTTCCTTAACGTCGGC  
 GGCTCATCTTCAGTATTTGTTATCTCCTCTGCTAATCCTGGTGAGGGTAAGTCAACCACT  
 TCTGTAAACCTAGCTTTGGCGCTTGCAAGGCGCGCTCCCGTGTAGCGCTGATCGAAGCT  
 GATCTTCGCTTGCCACGAGTGAGCAAGTACCTCGGAGTTGAGGGCAACGCAGGTCTGACT  
 GACATTCTCATTGGCAAGGCCGAGGTTAATGATGTGTTGCAGCGTTGGGGTAGGACTCAG  
 TTGTACTATCTCCCGGCAGGGCGCATTCGCCGAACCCGAGTGAGTTGCTTGGTTACGCT  
 GAGATGGACAAGGTCAATTGCGGAGCTTGAGGAAAGCTTTGATTATGTGATCATCGATGCC  
 CCTCCGGCGTTGGCGGTTACCGATGCTGCAGTTATTGGTCATGGCAAGGCTGGCATCCTG  
 ATTGCGGTCTCCGCAGGTTCTACAAAGAAGCCTGAGTTGGAAGCTACGCTGTCCACGCTT  
 GAGAATGCGGATGCCAATGTTGTTGGCGTTGTGCTACGATGCTCCCGCCTAAGTCTGTG  
 GCTGGTTATGGCTACGGAAATTACGGCTACGGCGACACCTCCAAAATCAATGCCCTAAG  
 CCCGACAACACCGAATAACCACCACCGATGCTTCCAAGGCCAACAAATGAGCAA

>RXA01273-downstream

TAGCTTCACTATTCTCACTGTCT

>RXA01275-upstream

CGCCATACTAGGCTCGGCCTTTTCGACGGGAACTCGGATAGGCTTCTGTAAAACCATCCC  
CGTTGAAGAGAGACTCGTGGCTGAAATAACCACCCCATTA

>RXA01275

ATGGAAAAAATTCGCTCACCCGCAGTCCAATCAGATGCACTGCAGGTTTTTAAATCAGCA  
CTTGCTGCGACAGTCACGTGGTGGATTTTCGGTTAACCTCCTTAACCTCCCAACTACCCCTT  
TTAGCTCCCTGGGTAGCGTTAATGACGATGCAATTCACCGTCTACCACACCTTTATCAGT  
GGAATTCAGACTGCAATTGCTTCTGTCTATCGGAGTTGGACTTTCCCTTTGTCATAGGCACT  
TACTTAGACGTAAGTGTGTGGACTTTTGGCCTTGCAATGGTCATAGGATTAATAGGTGCA  
CGAGTACCAAAGCTCCGCGCGGAAGGAATAGGTATTGCTACTACATCCATTTTCTTCTT  
GCCTCCGGGTTTGTATGATCAACAACCCCTTCTATACGACCGTATTTTAGAGATCCTGCTC  
GGCGTGGCTGTTGCCATAGCCATCAACCTCATCATCTTCCCTCCCTTACGCGACCAGGAG  
GCAAACATGGTGGTAGGAACTTAGATCGGAGGATGGGTGAGGTTTTACAAAAAATGGCC  
GATGAGCTTGCAGAAAAGTGGAAATATCGACAATGCAGATGAGTGGCTGGAAGAAATTAAT  
TCTATTAACAATGACCTAGAAAAAGCGTGGCACTCCGTGCGGTTTCGTTCGCGAAAGCCGT  
CGAGTTAATCCTCGTAAAATCCGCATCCAAGAGGGCCGCCCCAGCCTACGGAACAAGT  
TATGAATCAAACCTCACCAGCATTTGATGAAGGGATCGCTCATTTACGCCACCTTGCCCGT  
ACTCTTCGTGATACCCCGATTATAGATTCGACTGGGGATCCAGTATTCAGCAACAGTG  
GGTATCCCTTATGCACGATGCCGGAGCTTTGCTCGCAGATCCGAATCAGGAAATAGATCC  
TATCCGCGACCGGCTCTC

>RXA01275-downstream

TAAACTTTCAAGTGAGATGAGTG

>RXA01276-upstream

CTAGATGCCCCGAAAATAGCATCTCCTATACACCCAAAAAAGGGGAGCGCTGACAGAA  
AATAGTAATAATTTTGACAGCTCGTGCAAAGATGATTGGC

>RXA01276

ATGCGTAAAACCCATCATCACCATGCTCGCGACCACCGCGATCGCCTTTTCCGCCATCTCA  
CCAGTGCAGGCGCAAACCGTGGACACAGACACTGACGCCTCCGTGTCATCTGAGCTGAGC  
AGCGGCACAAGCTCAGGAAGTTTCAAGAGATTCCGAAGATTCTGACATCTCCAACCGGGAC  
ATCATCTTCCGCATCGCAGCTATCGCTGCAGTCGGCGGACTTATCGCAGGTGGTGTGCAC  
TGGGCAGTACAACAGCGCATGATCCCAAATCCCTCCAGGAATCATTCCAAATCCCCCT  
GCATGGCACCTCAGCGCCTGCCCCAGCACCTGCTCCCGCTCCTGCCCTCAGGCAGTC  
GCGCCCCAGGTTGTGCTGCTCCCGAGGTTGTGCGCCTGCTCCAGCCCCAGTACAGACCAAC  
CGCACCTACAAAACCTGCACCGAAGTATGGAACGTCCTGGGAAGGTCCATCCGCCAAAGC  
GATCCAGGCTACGGCACACACCTCGACCGCGACCGCGACGGCATCGGCTGCGAATCACGC  
CCTAGG

>RXA01276-downstream

TAGTTTGGGTTTTGGGGATCTTC

>RXA01281-upstream

GGACAACCTCATCAAATGCAAACATGCGCCACCGCTCCCGGAAAACCAGGGGCGATACC  
GCGCTTGAGTGCGAGGTGCCGTCAATTCCCAACTACAAGA

>RXA01281

GTGGGACTCAGCCGTTTACATTATCAGCTAGCCGCAGAAAACACCAAATCCCTTGTTAGA  
ATGGTTCCCATGACTGTTTCTCAAGGAAACGAACCAGCAAAGAAGCTCGCCACTGACCTT  
AACCGAAACCAAGTCGTGGATGAACCTTCTGCAGCTGTTTCCCGAGGTCAACTCACTTTG  
GAGGAATTTGAAGATCGCTCCTCCAAAGCATGGAATGCCCGCCACTTAGACACTCTTGTA  
GAGCTGATCTCTGATGTGAACGACAATCCCTACACTCTGCTTGGTCAGCAATTTCCCGGC  
GCCTCCTATGCGCCGGCGGCCTACGAGACCACTCCCCCAGCGATGCCCAATGTGTCAGAT

CCTGTAAATATTGTCCGCAACAGGATTACCGGCAACCCGAATGGCTCCAAAATGTCGGTC  
TCGTTTATGGGTGGCACCGTGCACAAAGGTGGATGGCATGTGCCTAATGTTACACATCC  
TTCCGCATGATGGGCGGCAATCAGATCGATTTGCGCGACGCCCTTCCGAAAGCGACCGC  
ATTGAGATCAACGCCACACATTCATGGGTGGCATCGAGATTATTGTTCCCGAGGGTGT  
TTTGTCAATTTGTGATGGCATGGGCATTTTCGGCGGCTTCGAACAGTCTGTGGACAAGGCC  
GGTGCACCTCAATCCCGCGCGCTGCCAAGCAACGCGCCACGGTCCACATCAAAGGCCTG  
GCGTTTCATGGGCGGAGTCAGCGTAGTCACCAAGAAAAACATT

>RXA01281-downstream  
TAAAAAGCTTGTGACGCGCCCC

>RXA01282-upstream  
CAGGATGGGTCCGAACGTTTCGCGTCGTTTTCGGGTGTGGTTCTGGGTCATTTGGTGGGCAG  
CGGTAGGAAATACAAAAAGCCCACTCTAAGATGGCAGGGT

>RXA01282  
ATGGATGAGCTGCTCAAACAGGAAGTCAAGGATTTCTCACCACCAGGCGTGCACGGATT  
ACGCCGGCCGCTGCGGGACTAGAAACGCAGCCGTGGAGTGATCGTCGGGTGCCGGGGCTT  
CGGCGGGAAGAAGTCGCGGATCTGGCGGGCATTCTTTGGAGTATTACATCCGGTTTGAG  
CGCGGAAATCTCAAGGGTGCATCGCCTGAAATATTGCAATCGTTGGCTAAGGCTCTCCAA  
CTGAGCCCAATTGAGCGCGAACACCTTCACAATTTGGCTTATCGCGCCGACCATCCGCGC  
AACCTACCTAGTGCAGAGACCCCAACGGCACCCCTCCAGGACATCGTTGATGCGGTCACA  
GATAAACCGGCGTGGATCCGCAACGAGCAGATGGATATTTTGGCTACAAATCGGCTCTGC  
GCGGAATTTACGCCCCGATTTTCAAGGATCTGCCCGATCGGCCCCAACACTGCGCGGCAT  
TGCTTTATCGGCGCAACAGCCTCCGAGTTCCTGGGTGGACCGGGATCAGTTCAGTGCAGGAG  
TTCGCTGCCAAACTACGCCCTCGAGTACGCCCCGGCGCCCCAGCGTGCCAGGTTTAAAGGAG  
CTTATCGACGAGCTCCATCAGAAAAAGTTCTGTTTTCCGCGATAATTGGGCGCTCTGCTGAT  
GTTTTGTCAATTCGGCTCTGGCATCAAACGTTTTCAGGCACCCAACTGGGGGAGCGGGTC  
TATGAATACGAGACGTTTAATCTCAATAGTGCACCGGGGTATGTGTTGAGCATTACTTT

>RXA01282-downstream  
TAGGTGGTGGAGGGGCGCGTCGA

>RXA01294-upstream  
ATGAAGGGATACCGCTCCTTTTCGGGGGTACAGCACTCCAGCAAGACTCATTTCGGCTCAG  
TTAGAGTTACACCACAACGACTCAAAAAAGAAAGTGGCAGC

>RXA01294  
ATGTCTACGATTCCCTGATGTTTTACCAAGTGAAGTGTTCCCTGAAATCAGTGGCACCAAA  
GAATTCGGTGGCCTGACTTATATGTTCTTTGATCAATTCACCTTTGCCCACCGCAGAACAG  
CTTGAGCAAGCTAAAGCAGCTGGCTGGTCACTGATCACCTGGGGATGGTGGAATAGCGAC  
ACCGATCTTGAGGATGTCGAATTGGAAGACATCACTAATGAAGGCGACAGCCTACCAAAA  
CTCACGGATGAATTCGCTGTGTCTTCACTGAGCACCTTCGATCTAAATTCCCAAGGTCTG  
CCCAATGATGATCGTGAGCCGCAACCAATTGAAGAAGCCGACTCACTAGATGACATCTTC  
TCCGAGGAAGAGGGCTGGGGTCTAATGGCAATCAATTGCCCGAATTGGCAAGTCCCAGCA  
GCGTGTGAATGGCTCGGCTGCATGAATGTTGGTGAACCATTTGAAATGTCACACGTACTT  
AGGGTGTGGCAGAACAGTTGGGGCGTCGAGGCCCTGGCTTTTGGTGGTGAAGAAGACGAC  
GCGGATCTGCTGCTTCGAGTCCCTGAAGAAAGCGAAGAGCTACTGAAGGCTCTCGCAGTC  
GCTTCTGACCAAGTCACTACCTACAAGCATGAAGATCTGGGATTCTTAGCTAGTCTTTGG  
TTTGAC

>RXA01294-downstream  
TAACTACAATCAATGTCATGACC

>RXA01295-upstream  
TTTCTGGTGTTACCTCGGGTAATTGTAAAAAATTCATTGATTAAAAACGATCAGCCAAT  
TGGCATGCTCAGACTCCTTGTGAAGAAAGTGACAGTTTCG

>RXA01295

ATGACCGAAAATCTTGATAATGCGTTGCTATCCATGCGGATGAAACCTGTACAAATGGCG  
CTTATGACACTGGGCTACAACCATGACATGGCGGTGACCGATTCCGGTATGGAACCTATA  
GTGCGCCGCCCAGGGCTGACCGTGAACCTCAACTTGGATTCCGGTCACCTTGTGCATCGTC  
GCTGATTTTCATGTGGCATGGCTGTGTCCCTGCAAAGAAACAGGCAGAGTACCTGCGGGCC  
GCTAATGAATTCAACAGGCCAACCCGTGATCTGCAGGTGGTTTGTAGATGAAGCTGATTCA  
AAGAACATGACTGTGCGAGGTCGTGAATTCTTCTCTCAAGCGTCGGCGCAACGTGGGAA  
CAGTCGGCAGAGTTCTGTGCACTACTGCATGAATGATGTGGCAACGACTTTCTGTCTTTGG  
TGCGAACAAATCTGGCCGAAGTTTTCCCTTGAACGCGTAGAGTTCAACGCAACTCCTCCA  
GATGTGGATTTTCGAGTTCTCTGAAGATCAACTCAAAGAAGGCAATCCCTTCGGGCTGATT  
GACGAACCCACCCCGCTGGTTTCTTTGGATCGTATCTACCAACAATACGAATTAATGGGT  
GCGGATCAACTCAAGATGGGGGAGGACTTCGTTGAGTATCTGCATATGGGTCAACGTGTC  
AGTGCATGGTTGACCGATGGCAACAACGGCAGCGATCGAAAAACCCTAGCGGTGTCTTCC  
GGTACAGGTGTGAAAATCAAAAACAAGAAGCAACTTCAGGAACCTTCTTGGACTGTGCAAC  
CTGTACTCGAAAGAACATGTACTGGTTCACAGTATTTGCGGAAGAGATCGAAAACGGCGCA  
AGGTGGGGTATTTTCGCCGAAGCACGCATCGATCTACCGGCAGGGTTAAACGATCATCAG  
TTGTGGGTATTCCTCGCCAACTCCAGCAAATGGACTGCAGAGGTGTGCCTGACCGTGGCA  
CACCGACTGCAGAAC

>RXA01295-downstream

TAAAGGCAGAACTTAAGCGTTCA

>RXA01296-upstream

TAAAACTCCTGTTCGAAATTGCCCAGACAGGTGTCCACCAACACTGCTACATTGCATTGG  
AGATCCAGAATCGATCACTCTACGACCAGGAAAAACTTTC

>RXA01296

ATGTCCATCGAGCAAGCAATCACTTCACTCTCCGCAAGAGTGCGGGAACTAAAGCCCATC  
ATCGAGACTGAAGAAGCCACCAAAACCGCACTGATCATCCCTTTATCAGCAACGTTCTC  
GGCTACGACGTCACTGATCTCTCGTGAAGTCATTCCGGAATACACTGCTGATGTTGGCGTC  
AAAAAGGGTGAGAAAGGTCGACTTTCGCTATCAAAACCGGCGATGATTTCCACTTCCTCATC  
GAATGCAAAAAGGTCGGCTCCCCACTCAGCCTCGATCACGCTAACCAGCTCGTCCGCTAT  
TTCAATGTACAGACACCGAATTTGCCATTCTCACCAACGGCGAAATCTACCAATTCTAT  
GGACAACCTCGATGCAGCCAACCGCATGGATGCAAAACCATTCATGACCTTGGATTTGAAC  
AATATTGATGCCCCGTCAGTTCCCTCATTTGGAAATGTGTACCCGCAAGCATTTCAACCCA  
CAAGCGCTAGCCGCCAACGCTGAAGAACTGAAGTACATTGCTGAATTGAAGAAAGTCATC  
GCGAATCAATTCCAAGAACCCTGACGTAGAAATCGTCAAGATGCTTGCAGCGACAGTCACC  
ACAAGCGTATGACTGCACAAAATCTGGAATTCTTACCCGCTTGGTTAATACTGCGTCT  
TCCCAGTTTCTCAAAGACGAGGTCAATCGTAGATTGCGCTCCGCCAAGTCTTTGAGGAT  
CCTGTCCAAACACAAGGTGCTGATGCAGAAACACCAGCAGAGGACGAAGCAGTAATCGAA  
GAAGTGGTTTCAGAAATCGTGACGACAGAAGAGGAAATCCACGGTCATTCAATTGTCCGT  
GCAATTTGCTGCTCAGAGGTATCGGCACAAGAAATCACCATGCGTGACGCAAAATCCTAC  
TGCGCTATTCTCTTCCAAGACAACAACCGAAAGCCAATCGCCCGTTTCTACTTTGATCGC  
AAGATTCCACGCATCGGCATCTTCAATGCTGAAGGCGAGCAGGAACACTTTGATTTGGAA  
TCCATCGAAGATATCTACAACCACGCTGATCTTCTGCATTCCCGCGTCGTAGCATTGAAC  
GCT

>RXA01296-downstream

TAAGTTCTGCCTTTAGTTCTGCA

>RXA01301

TTCTCCGCCTAGAAGGCATCGAACCTAAAGGTCTTCCCGCGCCTACTACTTTGGCGAT  
GTCTCTGACACCGTAGACATCTGATTGGTTTCCCGTCAGCCCCGCGCAAGCAGAATCC  
CTGCGCCGCGGCGCATTTAGCCAATCCGGTGGCGACATCGATGACGTTGTCTCCACCAC  
TTCCCGGACATGAAAACCATGCACAGCCGCCACTCCGGCCCCCTTCGATGGAGTCGAGCGC  
GTCTGGGACGAAATCTTCGATGAAGTCGAAGACCTCGGATGCACTCTGCCATCCAGCAGC  
ATCGGTTGGGAAGAATACATCGAGGGCCAGCCACCGCTGATACCTGCGACCAACTGGCC  
TCTGAAGTTTATGTTTCAGGTGTGCCAAGCACCGGTGAAGTCTGCA

>RXA01301-downstream  
TAAAGATTACCCGGAATTTCCC

>RXA01304-upstream  
ATGCAGGTAAACGAATTTGTGCTTATATCAACATTCGTGATTCGGCAAATTAATTAAAC  
TGAAAAAGGGGATTAATTACCCCACTTGAGGAGAAATTG

>RXA01304  
ATCCCCGCACAGAACAAAAACCTCCCAGGATCCGTCATCGTTGTGTCTGATCGGATTAAA  
TCGGGAGAAAGAATTGATAAAGCAGGACCCGTAGCAGTAGACCTTCTTCAGGAATCAGGC  
GTGGAGATTTCCACATTCACCGTCGTGGAGGAGGGCTTTGAACCTGTCCATCAAGAATTG  
GTTAAGGCGTTGGCGCGCCGGGATCGCGTCATCATCACCATCGGCGGAACGGGCGTGGGG  
CCTAGAAATCGGACGCCGGAGGCCACAGAACCGCACATCGATACGCTACTGCCGGGTCTG  
ATGACGCAGATTTTGTCTCTGGAATGCTCAATACCGCGCAGGCGGGTTATCTCGGGGG  
CTGGTGGGCTTGAGTGCCTCGGATTCACGGCCGCGCTCATCGTCAACGCGCCGAGTTCT  
TCCGGGGCGGTGCGCGACGCGCTCGGGGTGGTCTGCCCCGCTTTTCGGTTCCATTTTGTAG  
CGTCTT

>RXA01304-downstream  
TAAAGATTTTTGCTTATCGACG

>RXA01306-upstream  
CGTGCCTGTAAATGCGCTCGCTCTGCTGAAGACCACCCAGACAATCACCCGCTCCGAA  
GGAGAATCGATAAGCC

>RXA01306  
ATGACTGAATGGTATGTGCTTTTACCCGCCACTATTCTACTCATCGCGCTGTCTGCGTTT  
TTCGTATCATTTGAGTTCGCTTTTGCTTGCGAGCTAGGCGGAACCGGTTAGAGGAGACTGTG  
GAAACCTCGCGGTCTTCCCGCGCTGCGTTGCGAAGCCTCAATGAACCTACTCTCATGCTC  
GCGGGCGCGCAGTTGGGAATCACCATGGTGACTTTCGCGTTGGGTGCTATCACGAAGCCG  
TGGGTTTCATTATGCTTTGATGCCGCTCTTCAATGGGCGCGTATACCGCTGGTTATGGCA  
GATGTCAATTGCGTTTATTTTGTGCTGTTTATCGTAACGTTTCTGCACCTGGTCATCGGC  
GAAATGGCTCCGAAATCCTGGGCAATCGCGCATCCGGAGACGGCACTTCGAACTATCGCG  
ATTTCCCGCACGGGGCTTCATTAACCTGTTTTCGTCCATTGCTGCACTGGATCAACAAAATG  
GCGAACGATTTGGTCCGCAAAGTTGGTGAACTCCCGTTGATCGAGCTGCAGCTGGTGGC  
TATGACACCGATACCCCTCCATGCCCTCATTGAGCATTCGCGAGAACTGGCGCTCTGGAT  
CAGCAATCCGCCGCCCAAATCAGCGGAATTATCAAGCTGGATAAAATCACGGTCGGTCAA  
ACCCTGACCGCATCTCCATTTACGCACAGCGCCAGCGCCACGGTTGCTGAGGTGCAAGCC  
GCAGCTCAGCGCAGTGGCAGCTTGGTGTGCTTATCGACGCCCCCTCCACCTTTTCCCA  
CACGTCAATTCATGTGCGAGACACCCTTGGTGCTCGCCAGACGAGAAGGCTTCGAAGTGG  
TCTCGCCCAATCCTCACCGTTGCTGAGACCGACACGTTACACCAAGCGCTGGAATACATG  
CGGGAGCATAACGAGCAGATCAGTGCGGTGCTTTCCGCTGATGGGAAAACGGTGCTTGGT  
GTAATAACTTGGGATCACATCTTGAAATACCTGTGGCCTGCATCGGTG

>RXA01306-downstream  
TAGCTAATTTGAGGTGCGCTGAA

>RXA01310-upstream  
AAGGAACGTGCGCGTGAGCTTTCCGAGGCAAAGACGACTAGTCTTTAATCCAAGTAAGT  
ACCGGTTGAGACAGTTAAACCAGAAAGACGAGTGAACACC

>RXA01310  
ATGTCTCCGCGAAAAAGAAACCCGCACCGGAGCGTATGCACTACATCAAGGGCTATGTA  
CCTGTGGCGTATAGCTCTCCACACTCATCCCTCGAGCGCAGCGCAACCTGGTTGGGCATG  
GGATTCCTCCTCACTGCTCTGGCAGGCGTTGGCGCAGTCCCTCTTCGCAGTCGGCGCAAAC  
AGCGTTGGCCAGCAGCAGGAACACTGGGTCCCTCTACAGCATCATCGGTGTTGTATTCGCC  
GTTGTCTGCACAGTTTTGGGCACCGTCTTGATCATCAAGGGCCGAGCACCTTACAACCGT  
TACGTCAAGGAAACCGGCCGTACGCAG

>RXA01310-downstream  
TAGTTTCTGTATGCAGGTTCTTT

>RXA01313  
GCCCTACGCCTCATTTACAGCTGCTTGACCATCTGCGGCGTTGAATTTTAAGTCCGAG  
CGCAATGCCGTCGACGTGGCAAAACACATGCTCGCCAGCCAGGCCCAACAACGCGGTTCC  
GCACTCGTTGCGCTAGACACCCGCTCGGAAAACGCCGACGCCGCCACGGCATTAAAGAAAG  
TCACTGCTCATCCGCAGCTGGACGCGAGCGCGCACCCACCAAATACTTGCCGCCGAAGAC  
GTCCGCTGGATGACGCTACTATGCTCCCCACGCATCCTGGCTGCTTCAGCCAAGCGCCGC  
TCCAGCCTTTTCGCTTGATAGCGCCGAGTCCAGCGCGCCCGACGCACTAACAACCGCC  
GCCGAAAAATCCCCCGTATCCAGAACCAGGCCTACGAAATTTTCCGATCCGTAGACGTT  
GACCCCGCGAGCACAGAGGCCAACATTTACTCCGGCATTTCCGTGGCGAAGGTGACATC  
GTACAAGGCCCGCCCATCGGAACGGAAGATTCTTTGTGCTTCTCGATTCCTATCTGCCCC  
CTTTCCCTAGCACTTAACGGCGACGAAGCGCTCACAGAGATGACCCGTCGCTACTTCCAC  
TCCCGTGGTGCTGCCACTGTGAAAGATCTGGTGTGGTGGACCGGACTGACTGTGCGTGAT  
GTAAAGAAAGGCATCGCTGCCGTGCTCTCGGATGGACTGATTCACCTCTGTTGAAGGCCCG  
AATGGTGAAGAAATGTGGATCCCTACCTGGGCAGATGATGTCACAGACGCGAGAGGTTTCT  
GATGCACTAGCGTTGGAACCTAACCTCCCCGCCTTTGATGAATACCTACTTTCTTACACC  
GACCGCAGCCACGTATGGATCCCGAGCACCTTTTCAGCATCGGTCCCGGCAAAAACGGT  
GTGTTCAAACCCCTCAAAGTAGTTACAGGGTGAGGCACTGCCGGTT

>RXA01313-downstream  
TAGCCCAGCAAAATCTTCACTTG

>RXA01315-upstream  
CATGTGCGGTTGTGTCTTAAGTCATTGATGTACCTAACGCCCTAAGTTCACTCGGTGC  
AATATTGCACTGAGTGCAAGTTTACACTAGGTTTACTTCA

>RXA01315  
GTGGATATTGAAGAGCAGCCCTCGTTAAGAGAAATCAAGCGCCAAATGACCCTGGAAGCG  
ATAGAAGATAACGCAACCAGGCTCATTCTGGAGCGTGGCTTCGACAATGTCACAATCGAA  
GACATCTGCGCAGAGGCAGGGATATCCAAGCGCACATTCTTTAACTACGTGGAGTCCAAA  
GAGTCTGTGGCCATCGGGCACACAGCCAAGCTCCCAACGGATGAAGAACGTGAAGCATTC  
CTGGCTACGCGTCATGAAAATATTATCGATACTGTATTTGACCTGGTAATCAACCTCTTT  
GGCAACCACGACAACCTCAAGTCTGGAGTTGCAGGCGACATTATGCGTCGACGCAAGAG  
ATCCGGGTGAAGCATCCAGAACTGGCAGTGCAACATTTCCGCCAGGTTCCACCAAGCACGC  
GAAGGGCTAGAACACCTAATTGTTGAGTACTTCGAAAAATGGCCAGGCTCCCAACATCTA  
GATGAGCCTGCAGATCGAGAAGCAATCGCCATAGTTGGCCTGCTGATCTCGGTCATGCTT  
CAAGGTTCTCGTGAATGGCACGACATGCCACAAGGCACGCAAGCTGATTTCCAAGCCTGC  
TGTCGCAAGCAATTAAAAATACTTTCTTCTTAGAGGTGGATTTTCAGAA

>RXA01315-downstream  
TGACATCACAGGTCAAGCCGGAC

>RXA01316-upstream  
AAAGCGCAAGGCTAAGAAGGATTCCCCAGAACCAGGCGATGACGATATCATCGATGGAGA  
AGTAATTCTCCGCAGAATTAAGGAAGTCGGTTTCACCCC

>RXA01316  
ATGGATATTTCCATGCTCAACGTAATAACGAGCTACACCATTGTTGGGCCATTTTGGCCATC  
ATCGGCATCTGCGGATTGCTTGGTGCCTTCTTGGCAGCCACCACCAGAGAAGATGCCTTT  
GAGGTTGCTGATCGCCAAAAGAAAATGGTGTGGGTAGCAATCCTTATCGCATCCGGATTT  
GTCCTCACCGCGCTAGGTCCATCGATTCCGATCCTGCCATGGGTGCGCCATCATCATGATC  
GGCCTGTACTGGTTTGTATGTTGCCCGCAAAATCAAGAGCATCCTTGAAGGTGCCGGCGGC  
TGG

>RXA01316-downstream



TAAAAGCTCCCTGAACTGCGAAA

>RXA01317-upstream

ATACATCCGCCTTAATGGCACAATTGTAGGTGCATTAGCAGGACTGGCCATTTACGCTAT  
TTCCCATATCCTCTTCGGAGCTTAAC TAGGAGTAACCATC

>RXA01317

ATGTCCGATGCAAAAGACGATTCCATCTTGTCCAAGTGGAGCAATGCAGCTTCCGAGCTC  
AGCGGTGCCCTCAGTGGAGTAGCGAAGAAGCTCCGTGAAGAACTCTCTGAGAAGGAAACC  
TTCAGCAAGCTTAAAACCGAAGCCAGCGAAGCCGTGATCAAGCAAAGTCCGGCTCCTAC  
CTAGATGCCGGTAAGGAATTCGCCCCGCGACGCCGGATCCATCATCAAAGATGCAGCCAAA  
ACCGTCAAAGGTGCCGTGAGTATCCGATAAAAACGACGTGAAATCCGCCTTCGGTAAC  
GCCGTGGAAGCTTCCCGCGACAAGTTCGATGACACCCTCGAAAAGCGCAAGGCTAAGAAG  
GATTCCCCAGAACCAGGCGATGACGATATCATCGATGGAGAAGTAATTCCTCCGCAGAAT

>RXA01317-downstream

TAAGGAAGTCGGTTTCACCCCAT

>RXA01318-upstream

GGACGCGTTCCAGAGAAAAGTGCAGGCATAACCCCTAAAATACCCTGATCTTCCCCCGTG  
TCCTGCCCCCGTGTCACCCCTGCGTACATAATAGGACGC

>RXA01318

ATGGGAAAACATGAGGTTGCTCAGCAGACGGTTCCGGGTCCTTCGCCGGAAATGGAAGCG  
CAGCGCGTAAAGAGTTGCGCAAGCACAAAGCCATTGCCACTGGCCTGTTGATTTTTGCT  
GCCGCTGTATATTTCTTTGCGGTTTCGTGGAGACCCGTCCGGGTGAAACTGCAGCGTGG  
GTAGGTTTTGTGCGCGCTGCGGCAGAGGCCGGAATGATTGGCGGGTTGGCCGACTGGTTC  
GCGGTACCGCGCTGTTCCGTCATCCATTGTGGCTGCCTATTCCGCACACTGCGATTATC  
CCGCGCAAGAAAGACCAGTTAGGTGAGGCCCTTAAGCGGGTTTGTGGGGGATAACTTCCTA  
AATGCCCAGCTCATTACGGAAAAAGTCTCTCAGGCGCGGATCCCAGAGCGCGCCGGGGAG  
TGGCTCGCCAGCCGGAAAACGGGGAGAAAGTTTCGCGCGAAGTCGGCAAATTGACCGCT  
AATATTGTGCGCGCAATCGATCCGTCAGATGCTGAAGCGGTGATTAAATCTGCGGTGATC  
GACAAGCTTGCGGAACCCACCTGGGGCCCACAGCTGGGCGGTTGCTGGAACAACTCCTC  
GCCGAAGGCAAAAGCCGAACCAAGTTGTCCAGGAACCTCGCGCAGTGGCTGCACAAAAAGGCG  
TTGGGCTCCGAGCCGCTGATTGATCGCCTGCTCAACGAGCGCCGCCGATTGTTGGGCGCCG  
AAATTCATCTGCGCAGCTGGTCAGCGGCAAAGTCTATGACGAGGTCATAAAATTCATGAA  
GCCGTGCTGCGGATCCTAACACGAGGCCCGCAAATCGCTGCGCCGATTCTTAATAAA  
TTGGCGCAAGACCTGCGAGCATGACCCAGGCATGATTATTAAGTTGAAGAAATCAAACGC  
GACATCATGGGCTCCGCGGCCATCGCGCAAGCCGCGCCAACCATCTGGGCGTCAGCCTCC  
GAGTCGCTCATTGAATCCGCAGAAGATGAGTCATCAATTCTGCGTCGCAAAATTGCCGAA  
GCAGCTACCAGCTGGGGTCAAAGATTGCTTGTGCGACGACTCCCTCCGGCATTCATCGAC  
ACCCGGATTACCGGCGCCGCTGCTTTCTCGCCGACAATTACGCCCCGAAGTCACCGGC  
ATTATCTCCGAAACCAATTGAACGATGGGACGCTGAAGAAGCTTCAGAGAAAATCGAACTC  
ATGGTGGGCAAAAGACCTCCAATACATCCGCCTTAATGGCACAATTGTAGGTGCATTAGCA  
GGACTGGCCATTTACGCTATTTCCCATATCCTCTTCGGAGCT

>RXA01318-downstream

TAACTAGGAGTAACCATCATGTC

>RXA01322-upstream

TGGCCTGCCCTGAAACTTTTACGGCTTTTACAGAGCGCAGGGCATCATTTTCTTGTGTGCG  
CAACACTTGAGAAAAATTGCGGAAAAGGACACTGCTGTTT

>RXA01322

ATGAAACTTGACCTCGTATGCGGATGAGGAGCCCCAAAACCTTTCGCGGCCCTCGCCTCA  
CTTGCTTTAGTCATAGGTCTCGGCCAGGTACCGATCGCCCAAGCTCAAACCGAGTATCGA  
ACCGCCTCCGACGGTTCCCTGAACTGGGGATTAGGCAATCGTTCCGCAATTACATCCAA  
ACCGGCGTGGCCAAAGGTTCCATCACGCTTGCGGACGGCGCATCCGACAACGGTGGCAAC

TTGCGATTACCCCCACGCACCAACGGCACCCGTCAGCAGCGATTCCCAAGGCACCGTG  
GAATTCAACGGCTCCGTGCACCTCCTCGGACACCAGGCAGAGGACAAATGGATCCTGGAC  
ACCACCATGTCTGACATCAAAATGGTGTTCACGGATCCTCCGCGCAGCTAGTTGTGGAT  
TTGGTTGCCCCGCGAATTC

>RXA01326-upstream  
CCGGCTGGCGCTGAGGAAACCTTGGCAGGCGCCTCCCCGAAACT

>RXA01326  
TTGCGCGAACGACTACTTCAAAAACATGGTGGCGAAGTCATCGACAATGAAAACAACGAC  
TGGATTCTCCATCCAGTTTCGTGATGACAGCGACCGAAAAAGGCTTGTCGAACTGCCAAC  
GACATCATCCGCGAGACCGAATCTGCACGTGAATGGGACAATTTCCCCGAAAATGCGATC  
GCAATTGCAAATGACGGAACGGGCGACTTAATAATTCTGCTTCCCGACGATGATGCTTTC  
TACATCTGGTTCGCACGAAGATGAACCCCTGATCGAAACTGAACTTGAGGATGCC

>RXA01326-downstream  
TAAAACAGCTGGACAGAATTCGA

>RXA01330-upstream  
CCGTCCGTTTTCTGGTGGGTTCGGCCCCGCATCCAGCCCTAGAAATATCGGAGAGCTGCT  
CGTTGAGGCCCAATGAAATGCCTCCGAAACAGAAACAGGC

>RXA01330  
ATGTGGAAAGACTTAACCGAACCCTGCCCCGAAGCTTGCGCTGAGGGCTTAGAGATCCGG  
GTGGTTAAATCTCCCGAAGAGCTGGCAGATTACGCTGCAGTTCTTTCTGCGAATTGGAAT  
CCACCCGCGCGAACTGTGCAGCGTTTCTATACCGAAGCAGCTGAATACGCACTGAGAAAG  
AACTCGCCCGCACTTTATCTGGTGGGTATGCGGGCAACCGCGCAGTGTGTTCTGCGGAA  
GCATTATACACGCGAGCGTAGTTGGAATCTACAATATCTCCACCCCTGAGCACAAACGC  
CGGCGTGGCTACGGCGGAGCCATCACCTTAGCCACGTTGCATACCGCACGTAACGCAGGG  
TGTGACACCGCCGTGTTGCAAGCTTCCGAAGATGGTGAAGCCCGTTTATCGCAAACCTAGGA  
TTCACCGACTGCGGTTCGATTTACTGAATACTCTTTG

>RXA01330-downstream  
TGATTAGTTAGGGACCGTATGCCG

>RXA01331-upstream  
GCCTCGGACTGGTTAATCCAACAGCCAGGTGGAGCTGAC

>RXA01331  
ATGAACATCATGGGTGACCCCGCAGATGGTAACGGCTGGATGTATGCCTACAACGGCTTG  
CACTCCGTGGCCCCGCCACTATGCATGGCCAGCAGCAGGCGAAGGCTCTGCCACCGCGATG  
CTGTTCTGGTGGCCTCAACTTCTAGGTGTGGGCACCGATGAAAACCCAGATCAAGTCAAC  
GATGTGGATCAGGCTGCTCGTGATCTCAACGTCGGCTACTTCATGATCAGTCCGTGGACG  
TTCTGGGATTTCCAGATCCCCAACTTCCGCCAGATCGATCTGCTGTGGCAAACCCAGGC  
GTGACACCGGTGTGCAAGAAGGGCGACTCGGTGATCTTCGCAGTCAACGATATGTTCACT  
GACGCCGAACCTGGATCAGATGCGTGCACCTGGTAATTCTCCAGAACCCTGCCAGAGCTT  
CCTACCTTGGGCGAGCTTGGGTGGCTGAAACTGAAGACGAGGTAGATCAGACTTATTAC  
CATCGTCCAACGGTTCTTGCTGGTGTGAACCTCAGAGATGCCTTCAGCCGAACTCTGTAT  
GCACCGGATCCAACGAAGCCGCATACGGTCCCTAAC

>RXA01331-downstream  
TAATCACAAAGAGTATTCAGTAA

>RXA01333-upstream  
CGCCCTTTAAGGCCCCGTAAAGCACTCCACAACACTTCACGGCAGGCCGTAATTTCCCTGT  
GAGGTACTTTCTTGCAAGTTGTAGCGCACCGCCGATACCA

>RXA01333

ATGCCTGGCGGGTGCTCCGGTAACATCGTCCGCATGCTGCCTAAATCCCGGATTTTCTCC  
GCAATCTTGCTCGGAATTGGTGTGGCACTTGTGGTCTGGGGTCTGGTGGCTCCGCGCTTT  
GTGCACGCTGATGGCCGTTTGCCTCTTGATTGAGGCGACGACGTACGTTCTCCATGAC  
TCTGACGCTCAGACCCTATTAATTCTGATCCGTTGGCCGGTGTGGTGA CTACGCCGGTG  
ACTCGTCAGTTGCATTTTGAGGTGATGGATCCTGCGAGTGTGATGATGCCACTATTCGT  
ATTGGTGATTTCGATGTTGCGTGGTAATCCTGATACTCAGGGTTTTGAGCAGGAACGGCTC  
CTGTCAGCGACTGTGTCGAGTTTCCGCATTGATCGCACCTCTGGTGAGGTTTTGTCCGAT  
ATTGCGCTGACTAATCAGTTGGCGAGCCCTACGGTGCAGTATTCGGTGGATGGCATTG  
TTGAAGTTCCCAACTGACGCGCAGGAGACCCTTACAACGTGGTGGATCCGGTGCTGAGG  
TCTGCGCTGCCGCGGATTTTGTGGAGTCCACGGAGATCGATGGCCGTGAGGTGCTGCAT  
TACCGTCAGGTGATTGATAACGTGAATGTGGCGGAGTATTTGCGGGATGCCAACAAACACC  
ACCACGTTGACTAAAGAGGATGGCGGTACCACGACGGGCTATTTTTATCACAATGTGACT  
CGTGATTTTTGGGTGGATCAGCGTACCGGTTTGGTTGTCGATCTAGCTGAAAATATTGAT  
GATTTTTACGCGCAGCGCAGCGCCAGAAGTACGAACAGAAATTGCTTTTCGACGCCTCC  
CTCGACGATGCAGCTGTCTCTAAGCTGGTTGCACAGGCCGAAAGCATCCCTGATGGAGAT  
GTGAGCAAAATCGCAAATACCGTAGGTATTGTGATCGGTGCGGTATTGGCTCTCGTGGGC  
CTGGCCGGGTGTTTTGGGGCGTTTGGGAAGAAACGTCGAGAAGCT

>RXA01333-downstream

TAACCTGCTGTTCAAATAGATTT

>RXA01336-upstream

CATGGCATCCGCTCCAACGCGCGGGCGGGGGAGTCCACGGAATGCCCGGCTGGTGGGC  
AGCGCAAGCCGTTTTAGCAGATCACAGGTAGAATTGCGAC

>RXA01336

ATGGAGCCCACCGTAAAGCCAGCGCGGCCACACCATCCACGTCACCGCCGACACCTGG  
CGCATCCGCTGAGTGCTCAGCCCACTCACACCCCAACGACGCTACGCGCGCCGGGCT  
ACGGCAATTTCCGCCATAGGCAGCGTGCTTATCGACGTCCCCCTCCAAGGCGAACGCATC  
TCTGAATCCACTGCATACGACGGCCAAATCAACGCCGACTGGAACGCAGAAAGTCACCGGC  
ACCGATGTGAACATCGCACGCGACATCATCTCCCGGCTCGCAGCGGTGCCAGACGTTCAA  
GTCGACGGCCCGTTGTGGTCTTTGAGTGACAGTTTGGCTGCAGAGGCTGCTGTGGAGGCA  
TTGCAAGGTGCTGCGGACACTGCGCGGAACACCGCGACCGCCATCGCAGAATCCCTCGGC  
GGGCAGCTAGGTGCACTTCTCTACGCAACAACCGACACCCACAGCTCCACACCGATACCA  
GCACGCGCAGAAATGATGGCAGCAAAAGCCTCCATACCACCGCGCACACTCGACCTAGAA  
CTCGCCCCCTCTGACATCGAAGTCACCAAAGAAATCGCCGTGACCTTTGAATTCCTTGCA  
GGC

>RXA01336-downstream

TAAACCGCGATTTGGTATTTTCGG

>RXA01337-upstream

GCTGGCTATCTCAATTCCGCTCGGGTCGCACTGCCACGCGGAGCGATTAGTGATTTTGA  
TACGCAAGAAAAAGTTTCTTAGCAGGGTAACCTAAATGTC

>RXA01337

GTGACATTTTCGAGGCGGAAACACTGGCGCAAAGCACGCGGTGCTTGTGGTTCTGGCCCC  
AATGGGTTGACCACGGCGGGTGCTGGCCAAAGCAGGTTGGCAAGTAGATGTGTATGAG  
GCGGCGCCAAACCCCTGGAGGGGCGGCGCTCAGAAAGCGTTCTGGGGGAGGGGACTATC  
AGCGATTTGGGTGCCGAGGGCATCCTTTTCGGGGTGGCAAGCCCAGCTTTTCACTATTTG  
GGTCTGGAAGATCACGGCCTGGAATGGGCGTATTCTCCCTTTGCGATGGCCACCCGTTA  
GATTATGGCAGGGCCGACTGCTGGAACGTCCTCCAGAGACCGCCAAAAAGCTTGGA  
CCTGATGCACGTCGTTGGAAGAATTTGCACCAGGGCTTAACCAAAAACATTGATAAACAC  
TTGGCCAAATCTATTAGGGCCGGTGCTGAAATGGCCAGCACATCCGATTCCGATGGCAAAG  
TTTGGCCCATTTGCGTTGCTGCCCCGGAACGTCCTAGCCAGTGCCGCTTTTGAAACAGAA  
GAAGCCCGATCCCTGTTTATCGGTTCCGGCGATGCACTCGGTGACTCCACCACACAAGCCG  
ATGACCGCATCACTTGGATTGCTTTTTGGCGCTCTGGGGATGTCGCGAGGATGGCCGGTT  
GCAGTTGGGGGAAGCGGACGGATCGTCGATGCTCTGGTCAATGTTCATAAACCATCACGGT

GGCACCATTCACTGCGATTACAGATTGATTCCCTCTCACAATTCCGCGACACCGATGCC  
ATTATTCTGAACCAAAACCCCTCACAGGTGCTGAAACTCAAAGGAACTGACCTTAATGCA  
GGGCTTCCGCAACGCATGAGCACCTGGAAACACGGACCAAGTTCTTACAAAGTGGACTAC  
CTCCTTGACGAACCAATTCCCTGGAGCAATCCCCAGGTAGGCCAGGCCACAACCGTCCAT  
GTGGGCGGAAGCTCTGAGGAAATCGCTTTTCGCAGAAGCAGAAGTCGCAGCGGGCGGATG  
CCCGAACGCCCCGTTTATCATTTTGTGCCAACAAAGTGGCGGATCCTTCACGCGCCCCG  
GAGGGGCGCCACGTCTGTGGGCCCTACGCGCATGTGCCGCGGGGTTTCGTGATAAGCGA  
GCTGCTTTATTAATCACTGCGCAGATTGAACGCTTCGCCCCCGGTTTCGTGATCGCATC  
GTGCATTTCAGTGGATACCAACGCGGAGGATTTAGAGGCGTGGAACCCCAATCTTGTGGC  
GGAGACATCACCGCAGGGTCCGCGCTGCTTCGGCGAATGCCGACCAAAATCGCGGAGAAA  
ACGTACATGGCATCCGCTCCAACGCGCGGGCGGGGAGTCCACGGAATGCCCGGCTGG  
TGGGCAGCGCAAGCCGTTTATGACAGATCACAGG

>RXA01337-downstream  
TAGAATTGCGACATGGAGCCCCAC

>RXA01342-upstream  
GATGAGTATTCTCTCCGAGGCAACGAAGTTAATATGTCCATGAGGGCGAAGTTGTAGACA  
ATATTTGGCCCATATGGATAATTGACAGGAGTTTAACGCC

>RXA01342  
ATGGAAACCCCAACCAAGACATGGATGTCCGCTGGTTATACACCCAAAGCCAGCTCAAA  
CTCCGCGAAATTTCTCCCAACAAACAAACCTTCGATGTTCATCCAAATCAGCGAATCGTT  
GACCCACCGACTTCATCAGGCCCAACAGCGTGGTCTTATCCGTTGGCATCGCCTTCGCA  
GAAACGCCCCGACGGGCTTCGCGATTGGGCACACCGACTCGCCGACGAGGGTTCATCGCG  
ATCGGGTTTCGGCTCCGGCTCACCTTCCACAGGTTCCGCGAGGCGCTTATCGACGCTCC  
CTCCACCTTGGCCTCGGCTCTTTGAAGTCCCCCGTGAAATTCATTTATCTCGATCACC  
TCCAGCGTGCATGATGAGCAAACCCGCGCTGCCGCGCGCTGCAACAAGAACTCCTCCTG  
GAACAGGAACGGCTTAACCTCCATCGCCATCTCCGGTGGCATCGAAGCCCTGTGCCGTGCT  
GCCGCCGACTATTTGGGTGGTGCAGTAACCATCGTGACAGCGACGGCCGCGTGGCTTGC  
TCTATTACCACCGATGACCTAGACGCACTCCCCAAGCTGTCTCGCGCTGAACGGATCC  
AGTCAAGCACTACGGATGCCACCAACTTTGGATTTCATCCACCGCATGACCCGCTACGGC  
GACCGCCACACGTGCTCTCAGTCTTATGCCCACCCGCCCCACAGACCAACACCGCGCG  
CTGATCAGACACTGCGCAGGCCTTGCCGATATTTTGCTCCAACGCCCCGAAGCCATGCGC  
GACCGAGAAATCGAAGTGCGATCACTTGCCATGTCACTACTTCTGGGTGCAAGCGACGAC  
CTGGCCACCATTACCGCGTGTTCGCTGACATCACTGATGCTTCCGGAAATATCCGCCCC  
ATCCTCATCACCGCAACACACCCCAATCAGTACGAAAAGCACTCTCCAGTGTGCCACC  
GCACTGTACAAACAGGAACGAGCACTAGCTCATCTACGCTCGCCGAATCCACCGAACTC  
CTCTTCTTCGCGGAAGCCGACGCTGCACAACATCGTGCAACTTTTTGGTACTGCCGCA  
AGCGGAGTTCGCTCTGCATTGGTCTGCCACCCGAGCGGAAAACATCGATAAGAAACTC  
ATCCGGAATCACTGCCACCGCAAAAACCTTACAACCTTGGAAACCCACGCCGAACCCGT  
GACGGCACCTTGCTGTGGCTCCAAAACCCGAGCTGCGCAAAATCCTTAAGATCCGATCC  
CGCGACACCTACGACCGTCTCCTCGACCACGACCGCACCAACAACACCGAGCTCGCCCC  
ACCTTGGTGTCTTTTACTCAGCACAGCGGACATATAGGCGACACCGCCAAAGAACTGGGC  
ATCCACCGCCACACCGTGCACCGCATGATCCGCATTGAAGAGATCTGCGAAATCGAC  
CTCAATGATCCACTGACCAGAGCGGAGCTGCTCTTAGTGATCGCAACGAAGGAGGGAGAC  
GTGAAAAGCAA

>RXA01342-downstream  
TAAAAAGACCCCATGCAAAGCAT

>RXA01348-upstream  
ATGGGACAAATGAGCACGTGACTCTACGATCTGCATTACTTGCGCTACTAAGTTCCGGACC  
ATTGACTGGGTATGACGCCTCCAGCGATTTGGGGCCTCG

>RXA01348  
GTGGGCTTTGTGTGGAGTGGTTCCGATTTCGCAGATTTATCCCGAACTTCGAAAAATGGAA

GCCGAAGAACTCCTCGTGGGATCCGATGTTCCCTGGGGCTCCAAAGGCGCCACCAAAC  
GAATACGCCTTGAGTGAAAAAGGCTGGGAAGCGCTAAGAAAAAGCGTGGTACGAGCCAGTA  
ACCTACGGTCCCACCAGAGATCCTGCCAGGCTTAAAGCCGCTATTTGAGGTCGGTACA  
AATGGCGATGCACGCCGACATTTAAGGGCGCACATCGCTCATTTTGAACAGCAGAAAAATT  
CAATCAGAATCAATGATTGATGAGCTGAAAGCAAAAACTCATCCAACCTTGGCACGGCGA  
CTTGAGCGCTCCCCGAAAAAGGAGCACGAGCGAATAGTCGCGTTTAAAGTGCTTGCCTAT  
GAGGGGCAGATTGCACGCGCTCAGGCAGAGATTGAATGGGCGGAAAAGGGCTTGAAACTA  
CTCGATACCTT

>RXA01348-downstream  
TAGTTTTCGAACACGTCCGTATC

>RXA01349-upstream  
AGTTGTCAGCTGGGATTTGCCGATGGTGTTATCTTTGATATTTACCTTAACCCGTTTCT  
AATTCAGTTTTCTCGTTACCCGAAAGGAATTGATCGATT

>RXA01349  
ATGGCGACATCAGCTCGAGATGCCGAAAACATAGACCAGGCCGGTAGCGAATTCATTGAA  
TCTGATTTCAGGACACACCGCAACCCCTGAAGAGGTAGTAGCCACCGCTCTGACATTTTTT  
GCAGAGGATGGTTTTAGCGAAACCAAATTGGAGAAAATCGCGAAGGCATCTGGCATGTCC  
AAGCGCATGATCCACTATCACTTTGGCGATAAGAAAGGCCTGTACATCAAGGCTGTTTCC  
TACGCGTTGCGATTGCTGCGCCAGAGGCTGAAGCGATGCAACTTGATTCCGCGGTACCA  
GTTGATGGTGTCGCGAAAAATCGTCGAGGCTTTATATACCTGCATCACCAAGCACCCAGAA  
GCAGTGCGCCTGCTATTGATGGAACCTGCATAGCCAAGACAGCGTGGATTCCACCGCG  
GCATATTCCGATGAATCCAATGTGCTGCTCAACCTGGATAAGCTGCTCATGCTTGGCCAG  
GATGCCGGCGCCTTCCGTCTTGGAACTCTCCGAGAAGACGTAAGTTCTTATTAGCTCC  
CTGGCCTACTTCCGCGTATCCAACAAGGTCACGTTGAAGAACCCTACTTCCCTTGATTG  
GAATCAGAGGCCAATATTGAAGGCATGAAGCGCATCGTCGTTGACACGGTGCTGGCATTC  
TTGACCTCAAATATTCAAATTTCTGGCAACTCCAGCTACCTGGTTGTTGGTGGCAAGACT  
GCAGAACCAGAACTGATGACAGCGTCTACAGCTTTGATACGGACGTGTTTCGAAAAC

>RXA01349-downstream  
TAAAGGGTATCGAGTAGTTTCAA

>RXA01357-upstream  
ACGGCGCAAGTCCCAGCACAGATATAGTTATGCAAATGTGGCCAAGGCACACCAAGAAT  
GGCTACACGCTGCAGATAATGACACGACGGAAGGTGGAGC

>RXA01357  
ATGAGCGCTGAAGAAGTTCGACAACCTACGAAGCAGAGGTTGAAGTCTCTCTTTACCGCGAA  
TACCGCGAGCTAGTCAGCCAGTTTTTCTATGTTGTAGAACTGAACGTCGCTTCTACTTA  
GCAAATGCAGTGCAGCTTATTCCACACAACAGCGGAAACGATGTCTACTACGAAGTCCGC  
ATGTCTGACGCCTGGGTATGGGACATGTACCGCTCAGCACGCTTCGTTTCGCTACGTCCGA  
GTGATCACCTACAAGGACGTCAACATCGAAGAATTAGATAAGCCTGACATCATCATGCCT  
GAG

>RXA01357-downstream  
TAGTTCTTAGGTTTAAATCGCT

>RXA01359-upstream  
GTTGGACCTTGTGCGATTTGGATGGGGAACAGCAGCCCAATCTTGACCATATTGCGCGAG  
CCATGGAGCTTCGGGGCACTACATACAGTGAGGTAGCAGC

>RXA01359  
ATGATTGACTCCCGCTTGCTGGCATGGGCGTATCTCTCAAAGTGGTGGAGGGTCCCAAT  
GCACACCTGCAAAAGCTCCTGAAAGAAGGTCATGATGTAGAGCGGATCGCATTTGGTATT  
AAACACCGCGAAGAGTGGATTGGCGAAGGTCTGCTGAAAAACACCGATTCCCGGTACTCG

ATTGATACCGCGCAAACCTGATCTGGAAACTATCGCCAAACTCGGTGGGCGGCTCATCACA  
 CCTGAAGACGACGAATGGCCGATGGAAAGAAATTAGACCATGCTTTTGGATTGCGCGTTCT  
 GGCATGAGTGATCATGTGCGTACCTATCAAGATGATGCGCTGCCACCGCATGCGTTGTGG  
 ATTAGGGGAGGAAATCTCAGAACACTCAGTGCACAGTCCGTACACTCGTGGGCACCAGG  
 GCAATAAGCCAATATGGCACGGAAGTAACTCGGGAATTCACCCAAAACCTTGTGTCTCAT  
 CAGTGGACAATCATCTCAGGTGGTGCCTTGGGAGTTGATAGCGTCGCCCATAGTGAAGCC  
 GTACGTGCACAAGGCTCCACCATCGCGATCGCAGCATGCGGATTGGATCGCTCGTACCCC  
 AGCCACAATCGAGATCTGTTCAACCAGATTGCCAAATCCGGAAAGGGGGCGTTGGTGAGT  
 GAATATCCACCGGGAACCTCCACCTCAACGCCACCGCTTTCTCACTCGCAATCGTCTCGTT  
 GCTGCTCTATCTCAAGGAACGTGCTGTTGGTGGAGGCAGCCTGGAGGTCAGGCGCGCTAAAC  
 ACTTTGAGCTGGTGTGCTGTTTAGGCAGGATTGCTATGGCGGTCCCTGGGCGGTAAAT  
 ACTGCTGGATCACTTGGGTGCCACGAAAGGATTGAAACGGCAGCGCACAAATGGTCACC  
 AGTGGCGATGACGTTCCGGTCACTTCTGGGTGCAATGGATAGCCAAACTCAG  
 TATGAATTAACCTTCGCGGCCACTCCAGTACAGGGTTTAACCAGAAATGAGCTGCGAGTT  
 TTTGATGCGTTAGACGACCGAGGAGAGGGGAGGGAAGCGGCGAGTATCGCTACCGAAGCC  
 GGGTTGACCTTGCAAGTTAAACAATTTTCTCTCATTTGCATTGAACAAGCGCGGAATCGTG  
 AAACGCGACGGAACCTGCTTGGTTCGAGAAATGCGGAAATGCCA

>RXA01359-downstream  
 TAAACCTGGGGGTATATATAAAA

>RXA01362

ATTAATGAGTTGATTCTTTTGGACGTACACGACTTGGTTAAATATGGCGTACATGTCTAT  
 GGCGCTCCGCAGGAATCTATTAACCTTTTAAAGTGCTGCGTCGCTTTATCACCCACAAACA  
 GTGCTTGATTCAATTGATCATGACGGTTCAGGTAATCTCCCTGGTCTTAAAGACGACAAT  
 GGCAACTGGGACCGTCGCCCCACACAAGGACCGTATCCAACCTGGTCAATGCCGATACTTTG  
 ACGGTGTGGAAGTCCATCCTGGAGGATGAACAAACGCCATACTTGGATACCCGCATGGTT  
 TATACCGTCAACACGGAAGCAGCAGCAGCGTTGGAAAAGTTGGCTTCTGCACCTCGTATC  
 AAAGAACTCGGGCTGCAGTTCTCCAGTGGCTGGAATGAAACCACCGATAAGAAAAAGGGA  
 TACTTTGACGTTGGTTGGGGCTACCCAGCTTCCCTGGTCTGATGCCATTTTGCAGGGGCCG  
 CACCTGGGTGTTGCTACACCAATGATCAAGCAGCCCAATCCGACAATGAAGCATAATCAA  
 GATTGGTCTGAAATTTGATTTCGAGGCCATTCTGCAAACTTCATACCTGCAACGGCGTAC  
 CAGCCCGATCGCCAAACAAAGCCCACTTATGATGCTGACTACGGCACCTGGACTTTTCGGG  
 GACAAGCAGGTACCACTTGCAGACACTTTCCGAATTGCATGGAGGGAGATGGCTGCCACC  
 ACGGATTTAGGACTGTCTACCCATCAGTAATTCCACCGGGAGCCAACCATGTGCACACA  
 GTTAATAGCGCTGCATCACGTTCAAACCTAAAAACCATTTCTCGTTGGAGCACAGCTTGGT  
 GCAATTCTAAGTGACTATTTTGGCTCGGTCTCGGGTTCAAGCCACATATTTAACGACATT  
 GTTCGCAAGATTCCACTTCCAAATTTACATCCTTGGAAGAGCAGTTCCGCCGCACATAC  
 CTCCGCTCAACTGCCTGACCTCAGCTTATGCCCCATTGTGGGAAGAGATCACCGGTGAG  
 CCGTGGGATGTTTCAAGTGCCTTTGCGCAATGCCGAGCAACGTCGAGCAGCGCAAAACGAT  
 ATTGATGCCATGGTGGCATTGTCTTTGGGTATTAGTGCTGATGAGCTGTGCATGATTTAT  
 CGCACTCAATTCAGTGATGCGTAGATATGATCAAGAAGATCATTTTGGATGCCAATGGC  
 CGTAAAGTTTCCATAAGAGATCATCAAGCTGCAGCAGAACTTAAAGATGGCCAAGAGCTC  
 AGCGTGGAAAAGCGCACCTGGGTGCATCCCCAATCAGAAGTGTCTATACCTTTGAATAT  
 CCTTTCCGGGTGTTGGATCGTGAAGCTGATCTGCGTGCTGCATATGCAAAATTTGAAAAC  
 CAGCTTAAGGAGCCA

>RXA01362-downstream  
 TAGAGCGCTTATGTCTCACTCA

>RXA01364

ACGGGCACCCACCTTTATGATTCCCTGCAGCTGCTGTTCACTCTGGTGGATAAAGGCCAC  
 CACCCAACAGATGCTAAGGCTGTAGCTTTTGTATGCCGAGGCTGGAGAAGAAGGCCTGCAC  
 TTCCGCAACCTTTTACGCGGATCTCTTCTCCCTGCAGCCACAGAACTTATTGATCGAGTT  
 GGTCTTTCCAATGAAGCCCTAAACAAGGTCTTGGAACCTCCTGCTCTCCCGGGTGCAA  
 TCCGGTAAAGACCGCGGCTTTATCTCCTATGCCACCTTGGGTGTTACCGAGCTTGGCCAA  
 GTTTATGAGGGTCTGATGTCTTATACCGGCTTTATCGCCAGGAAGATCTTTTGGAGTT  
 GCACCACATGGCAAAGCCGATAAAGGTCTCTGGATGCTCCCGGTCTCAAAGGCTGATGAA  
 GTCCCTGCCGATAGCTTTATCGAAGTTGATCAAGAAGCCCTGGTGGCGGCGTAATCAAG

GTGCGTAAACGCCACCCGCGCGGATCATTGTGTTCGTCAGTCCTCTCGTGACCGCGAA  
 CGCTCAGCGTCCTTCTACACCCCAAGTACTCACCAGCTTTACTGTCACCCAGGCTATT  
 GAAGAATCCAGGCATCAAAGCGCATCACCACAGCCAATGATGTTCTCAGCCTCACCATC  
 TGTGAACCTGCCATGGGTTCGCGGCCCTTCGCTGTGGAAGCAGTACGCCAATTAGCAGAG  
 CTTTATTTTGAATTGCGCCAAGAAGAACTAGAGCAGCAGATTCCAGCGGAAGACCGTGCC  
 AAGGAATCCAAAAGGTCAAAGCGCACATTGCGCTGCACCAGGTTTATGGTGTGGACCTT  
 AACAGCACTGCTGTGGAGTTGGCGGAAATCTCGCTGTGGCTAGACACCATGAATGCAGAA  
 ATGGACGCACCTTGGTATGGCCTGCACCTGCGTAATGGTAACTCCCTCGTTGGTGCCACC  
 CGTTCGCTGTATGCACCTAGTCTGCTTAATAAAAAAGCCTGGTTAACTGCTACTCCAACC  
 CGCTATCGGCTTGATGATATCGCGCAGGCTATTGATGAAAACAAAGCAGAACCCCTCTTC  
 AACCACGGCATCCACCACCTTCCTCTTGCCCTCTACTGGCTGGGGAGCCACTGCAGATGCC  
 AAAGATCTTAAAGATCTTATGGCTACTGAAATCAAGGAGCTTAAATCTTGGCGTACTTCC  
 ATCCGTGCGTCTTTGAGTAAAACTCAGATTAAGCAGCTCAATAACCTTGCCCTACGCGTG  
 GAAACACTATGGCGATTTGTGCTGATGCGTATTTCGCATTGCAGAATCCAGATCTCACGT  
 AGCACTACTCTCTGGGGTCAAGAGCCAGCTGAGGTTTCGGAGGTTGTCACACGTGAGCAA  
 ATTGAACAAGACCTCTTTGGCAATATTGATGGTGCATATAACCGTCTACGCTTGGTGATG  
 GATGCTTGGTGTGCGCTGTGGTTCGCGCTTTGGATGCTGTTGCTACCGCTGAGCATCCG  
 GAGCGTCCAGCCCTTCCAGATCTTGATGAGTGGCTAGCCACCCGACGAGATTCTGGGT  
 ATTGATCTCCCTCTGAAGTCCAAAACGAAAATCAGATTGTCTTAGGTCCAGATACCAAT  
 TGGCTAGCCATTAATGATGCCGAGGCTACTGATCTTGGTTTTCTGGGGCATTGAGCTTT  
 GAGCGTGTTAGCGCAATCACCCGTGGATCAATGTTGCCCGCCAAGTGGCTAAACAACAG  
 AGCTTCTTCCACTGGGATCTAGACTTCGCCCACGTTTTTGCCAAGGGTGGATTTGATCTG  
 CAGGTTGGTAATCCACCATGGGTGCGACCAGATGTGAACCTTGAGGATCTGCTTGCTGAA  
 CATGAT

>RXA01366-upstream

ATGCATGAAAACAAATTCTATGTGTGTTGAGCTGCCAAAAGGGGTGGCGCGCCGATGAT  
 GACTGTCCAAACCTAAACCAAAGGTCTAAACTTTGGCTTC

>RXA01366

GTGAGTCAGTTTCGTCGTTGTTCCCGCCCTGGTTGTGGCAAGCCTGCCGTCGCAACCCTC  
 ACCTACGCATATTCGGATTCCACTGCGGTGGTTGGTCCCTTTGGCGCCTGCAGCAGAGCCC  
 CATAGTTGGGATCTGTGTGAGCATCATGCCGAGCGTATTACTGCGCCCCCTTGGTTGGGAG  
 ATGCTGCGGGTGAAACGACATCAAAGTTCGATGACGATGAGGATCTGACGGCTCTTGCTCAG  
 GCTGTTTCGTGAGGCTGGACGCAC'TGTGAGTGGTCTGGTTCCCTGAAGACGAAGTGGGCGGC  
 AACCATCCGGTGAACCGGAGTGC GCGGATCGCGGAACAGAAGGTTACCCGACGGGGTCAT  
 CTCTATGTTGTGCCTGATCAGGACGAATCA

>RXA01366-downstream

TAAGGTTTGCTATTCGGATTGGA

>RXA01367-upstream

CGCGCCAACCCCTTTTGGCAGCTCAACACACATAGAATTTGTTTTTCATGCATACGAGAAC  
 TTTCCGCAATCGGCACGGACGCGGTCTCCGCGGCCCACTC

>RXA01367

ATGCCCCGTCGAAGTTCCCCGCCACGCCTCTAGACGCCAAGCCTTCGACCGCGCAGTCTTA  
 GAGGCCTACTCCCCCTCTTTACGGGATTTACCAAAAAGAGCTCAGCAATCTAGACATCGCT  
 GTCGATACCGTTTCCTCGCATCGCACTCAGCGCCGACCTTGCCATTCTCCCCGATGAAATC  
 ACCGCCGACGGCCCCGTTCCACTTGGTCGCGTCATCCCACCGCGGATCGATACCAAGGGA  
 AACCCACGAGAGCGCATCGTTATTTTCAGAATGCCGATCGAGCAACGAGTCACCAAC  
 GCTGTGGAACGCCACGAGCTATTGACTCATGTTCTCACCTCTTTGGTGGCGAACTATCTG  
 AATATTGATCCACGAGACATCGATCCGGGATTCCAGGATCTC

>RXA01367-downstream

TAGCGTGGCCGGTGCACCATGGG

>RXA01370-upstream

CTGTCTGAATCGTGTGGGCGTTAGATGAATTGTTATAAACCGGATGTTTAACGGAATTTA  
ATACGTGTCTTATTACGCGGACTAGAAAGGTTTATAGGGAC

>RXA01370

ATGGGTGCATGGGACGATGCAATCTTGACTGAGGAAGTCAACGTTGATTTTCTCGACGAG  
ATCTCAGAAATAGATACTCAAGACATTCTTGAGGCGTTGGAAGACGCATGTTTGCTGGTG  
GTTAACCAGGACAACGCCACTGAAGACGAACACCTCAACGGTCAGGCGGCTGCGACGATC  
GCGGCCATCATGTTTGGGCGCTCCATATTCTGCGGGCCAGGTGCTGGAGAATTACCCATTT  
ATCCGCGAACTCGTCGGTGAGGGCTCTGAAGCTCTTCGCGGTGCTGCAGCGCAGGTTTTG  
GAAGAGGCAGATGTGGAATATGACCTCGAAGCTTATTTAGAGGCCCTCAAC

>RXA01370-downstream

TAGCCCTCCACTAAACAGCTTCA

>RXA01372

CAGGACACCTTCGTCTCTCCACCTTGCCACGGCCGAGGCTTGTCGCCTGCCCGCATC  
GTGGCGTCGATAAGCACTCTTTTAGATCTTTTAGAAGCAGACCCAGCATTATTTCCGAC  
CGCTTGGAACACCTCGCCGACTGCATTGATGAGGAAGTGAATCGCTATCGCCGGAACGT  
GACGAACTAGTCAATCCCGGCCGAAAAGTGCAGCGCATACGTAGATCACGCACGGATCGTG  
CATACCGGCCGAACGTATGTGGGACTCGCGATTGCCAACGTTATCGCCCCAATCTGGACC  
CGACGAGGCCTGGTATCAGCCGTGCTGGATTTTCCCGAGCTCATGGAATCATTGCCGGAA  
CTCCGCGGACCCGAGCCAATTACCGACGATATATTCATGACCCATTATAGATGACGAA  
CCCGGGGTGGTACCGTTTAGGGCTGTTGTCTGGGCCGAAGAGGAACCCGGAATCCCCGAT  
GCCATGGCGCAAAGCTGCGACGGACCTAGCAAAGGGGCGCTGACACAAGCACTGCGTTTG  
CTGGTGCGCGGACAGTCAGCCACGACCTATTCCATTGAAGAAAAGGACTTG

>RXA01372-downstream

TAAATGGAGCTATTGGAAGGCTC

>RXA01378

CATGTGTGGATTTACACAGGTGCGAGCAATCCGATCAAGGATCGCCTCTTCCCTTGGACA  
TTGGTGAAGGCTTTTCTCTCCTCCCTGCGCCTTGGGCGAAACAGTGTCCAATCGCCTC  
AAAAAGGCTCTGCACCAAGAAAAACGCGCCCTAGAAACCCTTTCACAACCTAATCTT  
GCGATCACCCCGCAGACCTCACAGAAGTACCAATCTCTACTGAGCTACCTCGGTGACATC  
GGAGTGAAGAAGAACTCCGATACCCGCGTGGTGAATTTCTCTGAGCGTGTGCTACTTTG  
CACTGGCTGCAGGAAAACCTCATCCGTGATCTCAAGATGCCACCCAACTCTATTGCTGTT  
ATGCACGGCGGTCTCCCCGACCAGGAGCAAAATGCGCCTGGTGGATGAGTTTAAAAAGACG  
GATTCTCCCATCCGATCATGATCACCGGCGATGTTGCCTCAGAAGGTGTGAACCTGCAT  
ACTCTCTGCCACAACCTGGTGCATATGACATCCCGTGGTCACTGATCCGCATTACAGCAG  
CGCAATGGCCGTATTGATCGTTATGGTCAAACCCACAACCCTTCCATCGTTACCTTCTTG  
CTCGATCCCCGCGAGGATTCCAAAGTAGGTGAAGTCCATGTGCTGGAGAGGCTCATGGAG  
CTCGAACATGAGGCGCACTCTTTGCTCGGTGATGCCGCATCTCTCATGGGCAAGCACTCT  
GAGCGTTTGAAGAAGAAACCATCCGCGAAGTCTTGCAGCGGTGCCAAAACCTTTAATGAT  
GCAGTGGCTGATCCAGCGGAAGTCTAGAAAACCCAGCAGGCCTAGATGATATTGATTGG  
TTGCTAGCCCAAATCGCCCAAGCCGATGCCAAGGCAGAAACAGAAGCAGAAGCAGAAACA  
GAAAACCAAACAGCACCAGATGCAGCTTCCAATAGCACGCAGCATGCACAACGCCGGTTG  
TATGCACAGGAAAGCTCTTCTCTATGACTGCCTCCTCGAAGGTTTCAATAACGTACCG  
GAGGATTCCATCAACCGCGGTGGCGTGGGGTTCAAAAAACACGATAATGACATCGTGGAG  
CTACCCCCACCGATGATCTGCGCCGTGCTCTAGATTTCTTCCCGCAGGATTATGTGGCT  
GCTCGGAAAGTTAAGGAAGATCTCCTACTAGCTTCCACACTGATGCGTGGCCAAGAACGC  
CTCAACGCTGCGCGCACTGGTGAAGATGGCAGTACCTGGCCAAGTGCCCACTATCTAGGC  
CCCCTGCACCCAGTCACT

>RXA01379

CTAAATGTTGAAGAGTGGATCAGTGACCACTACCTCACCAATGACGATGCCAAAGGTGCC  
TCATTTTCCAAGCGGTGCGCGAGCGCATTAAGAATGGAAAACACCGAGGACGCAACC  
CAGCAGAGTGGCCCTTTAACTCGTTTTTCCAGCAACCGCCTGCAGTTGCAGCATGCTCTT  
TCTGAGCTTGACGACGCCACCAACCGCCGCGCAGTTTAGTGCCCTCTGCACTGGGGTATGGT



GTCCCCAGCGCGCGCCACGCGCAGCGCGGCTCCGACACAATATCCTATTCCCTCTTGGGTG  
 GGAAATGCCGGCAGTGTGGAATTTCTTGACGCGACTCCCGCTGAAAGCTTTGAAGAGAAC  
 TTCCGATCCCTTCCCCCTTGAGCCAGTAGCGGTCAATGACAAGCCCCAGGATATCACCGCA  
 GCCAAATTGGTGGGCCAGATTTTCCCTTAGTGATACTCCCCCTGCTTTTGTGTTATCACC  
 GCTGGTAAATGGGTGGTTTTAGCCGAGCGTGAAACCTGGCCTCTAGGCCGCCACCTAGCT  
 ATTGATATTTCCCTGGTGGTGGAACGTAATGACACCAAAGCCCAGGGTGAGATGCAGCAG  
 ACGGTCTGACTAGCCCCGCGAAAATACCGAGCGTGCCGCCGATGGCACCACCTGGTGG  
 GAAGAAACCATTGAGCAATCCCGCGAACATGCTGTCAAGGTTTCTGGCGAGCTACGCAGT  
 GCGGTGCGTGAATCCATTGAAATCCTGGGCAATGACGTGCTCACACGCTATGAAGCTAAA  
 GAGCTCTCCACCGCTGAGATCGACGGTGGCGAGCTAGCTAAGCAATCTTTGCGCTATCTC  
 TACCGCATTTTGTTCCTGCTTTTTGCCGAGGCTTACCAGAGCTTGAAATCCTGCCAACC  
 GGCACCCCGGAATATGACGAG

>RXA01380

TCGCTGATTTTGGGATGCGACACCAAGGCTCGCCTGGAGGATCTGTACCTGCCGTTCAAA  
 AAACGGCGCAAGACGAAGGCCGATATCGCTAGGGAGGCGGGCCTGGAGGGGCTCGTCGAT  
 AAGCTTATCGACGCCCCGTCCCTCGACGCCGAGCGCAGGCAGCTGCATTTACGACTGAG  
 GGCTTTGAGGATTCCAAAAAAGTTTGGATGGCGCTCGCGCCATTTGATTGACCGCTTC  
 GCGCTCGATGCCGATTTGGTGGGCGAGGTGCGTGAGCAAATGTATCGCGCGGGTTCCATG  
 GCGGCATCGGTGGTGGCGGGCAAGGAGCAGGAAGGCGCAAAGTTCAAGGACTACTTTGAG  
 TTTTCCGAACCTTTTGACAAGCTTCCATCTCACCGAATTTTGGCGCTGCTGCGCGGTGAA  
 AACGAAGGTGTGCTGAGCCTCAACCTCGATGCGGGGCGACGACATAATCTACGAAGGTTTG  
 ATCGCCGACCGATTCTCCCTGGACACCCACACTTCTAGCTGGCTGGCTGAGGCTGTGCGC  
 TGGGGTTGGCGCACCAAACCTGTATGTGTCTCCGATTGGATGTGCGCATGCGTCTGAAA  
 GAAAAAGCAGAGGAAGGCGCACTCGATGTGTTTGCCACCAACCTCCGCGACGTTCTCCTT  
 GCAGCTCCCGCTGGTCAGCGCTCCACAATTGGCCTTGACCCGGGATTCCGCAACGGTGTG  
 AAAGTAGCTGTCTGGATTCCACCGGTAAGGATGTTGCCACCACGATCGTCTACCCACAC  
 CAGCCCCAAAACCGCTGGAAGGAAGCCGTATCCGAACCTGGCTAACCTGTGCGCGACCCAC  
 GGTGTGGAACCTCATGGCGATCGGCAACGGAACCGCCTCGAGGGAAACGGAACCTCGCC  
 GGCGAAGTAGCTGACATGATCAAAGCCGAGGTGGCACGCGACCAACCCCCGTGGTGGTC  
 TCCGAATCGGGCGCATCCGTGTACTCGGCATCACCGATCGCAGCCGAAGAATCCCCGAC  
 ATGGACGCTCTCCCTCCGCGGTGCAGTTTCTATCGCGAGGCGACTCCAGGATCCACTGGCG  
 GAGCTCGTCAAGATTGAGCCCAAAGCCATCGGAGTCGGCCAGTACCAACACGATGTCAAC  
 CAGGTTGCACTTGCCAAAACCTTGATGGTGTCTCGAAGACGCAGTAAACGCAGTCGGA  
 GTTAACCTCAACACCGCATCCGCACCACTTCTTACCCGAGTTGCCGGAGTGACCTCCACC  
 TTGGCAAACAATATCGTGGCCTACCGCAACGAAAACGGTGGATTCTCCTCCCGAAAAGAA  
 CTGAACAAAGTTCCCTCGCCTGGGACCCAAAGCCTTTGAACAGTGTGCTGGCTTCTCCGC  
 ATTTCTGGATCCACCGACCTCTCGACGCCTCCGCTGTTTACCCCGAGGCGTACCCAGTT  
 GTTCGCAACATTGCGAAAGCCACAGGATTGGATGTCTCGGGACTGATCGGAAACTCTGCG  
 GTGCTACCAAAATTGAAGCCCGCTGATTTCTGCTGATGAACGATTCCGGCATCCCCACCGTC  
 ACCGACATCATCGCCGAGCTGGATAAAACCCGGACGTGACCCCGCCGAGAATTCAAAACC  
 GCCAGCTTCAAAGAAGGCGTGGAGAAAATCTCCGACCTCACACCCGGCATGATCCTGGAA  
 GGAACGTGACCAACGTTGCGGCGTTCGGCGCATTCGTTGACGTGGGAGTGACCGAGAT  
 GGCCTCGTTCAGTTTCCGCGATGAGCGACAAATTCATCTCCAACCCACGAAGTTGTT  
 CGCTCTGGTGGGTGAGTGTGAAGGTAAAGGTCATGGAAGTTGACGTGACCGCAAACGCATC  
 GGCCTTTCCCTCCGCTTGACCGATGAACCCGGTGCCCCAGCTCCGCAAAGCGCGGAAAC  
 CGACCAGCCAAACAGCAGCGAGCTCCGCAAAAACAGTCCGCTAAGCCCGCCACAGGTTCC  
 ATGGCAGATGCTTTACGACGCGCCGGCCTCGGTGGC

>RXA01380-downstream

TAAGGCAACTTTCAAACCAAGCG

>RXA01383-upstream

CTTCGAAGAAGACGATATCCCTTACGAAGTCGACGTGGATGACTTATTTATCCTCGGTGG  
 CTTAGACAACTTCATAAATCCCCTTGAGGTGATTGAGATA

>RXA01383

ATGAATCTCCACTCCTTAGAGATTGCGCCAAATTTTCATCCGGCACAATTTCAGAACGAAAA  
 ACTTGGATCTTTCCCACTGCTGCTCGCTCATTCAAATCAAATCTAGTACACCCGCAAAGC

ATTGAAATCGATGCACAAACCGGCGTTATTTTGGCTATGGAAAACCGACTACAACGTACC  
 GAAGTTGAATCAGTAGAGTACCCAACGGATCTTCCTAATCCTGCATGGACAGGTCCAGCC  
 ATTTCTTGGCCACTAAAAGACCCATCAATCGATTTCCCTGACCCGCTCCCCACAGCATT  
 TCCGAATTACCACCTCAATCCGATAATCCTCGGCATTTGCGAGTATCCATCAGCTTAGAT  
 GCAGTGAAGGTGCTTTTCCGCGCTACCGGATCGGAGATTCAATACGTATTCGCTTGTC  
 TTTGCCCCGGACACGCCCTTCATGTCCGGCTTAGAAACAACACGTCGCGCCTGGATTGAG  
 GCGGCCACGGAAATGGACATCCATAACACATGGCCCATATCCTCACCAGTGACGGCTGG  
 ACTGCACTCTCTCATTCAGACAAACCAATACGCCACGAAGCCGAGTTAAAGGGATGGTTT  
 TTCCACAGTTTGTTCGGCAGTGAATGCCCTTGACTGATCTGAAGATTGAACGAATCTAC  
 GGAGGCCGTTGGTACTTTCGACAGCGGAGCCACCCGGTGGCAAGAACTCACAGACACAGAT  
 GATGCCTACACAGAAAAATGGCAGCTGGCTGTTGGAAGTTATCGTCGATGCCACCCTTGAC  
 GGTGCAATTCCACCACCACTTCAGCCACAACAGTTTGAAGCATCCATCACTCACATCGTC  
 GATGAGCAACTATGGGTCCCTTGGGCAGATGCTTCCAGTTCTACGATGCTGGGATCTTGAA  
 ACCGGAATAATACCTGGGGCAAACCTATGTACCTATTTCCGTTTCTCATAGTTCTCGGCTT  
 CAGTTTTCGGAAGGGTTGATTACGATTATGAAAATGCCTGGTCGCTGAATCCTGGGGTG  
 CGCATGCTTGCGGAGCCACAGCCGTGGATAGAGCCTGTCAATTGAACTCGACGTTCCAGCG  
 CCATGGGAATTACAAGAAAGCTTCCCCGATGGGCTTTACTTCCTAACTGATGGCAAGCAA  
 ACA

>RXA01384-upstream

ACTGTCCCTCACTCTGCGAGCAGCCATTGCGCTATCGGCAGCTACCTGCAAGGTGCGCTG  
 GTGGGAAGCGTCGACAAGCATCTTTAAGTAGCGTTGATGT

>RXA01384

ATGCGCTCACTTCAATCGGTCCCTTGACCTGCTGACTTCTAAGTCCAAAGTGGCTACCAA  
 ATTGTGGTGAACGAATTGAAAAGCATCCTGTTTCATGGATTGGGATGGATGATGTATCCG  
 CCATTTTCATCCATGGACTGATGCTTCGACCTTGACGATTGAGCGAAACGGAACCAAGTCGG  
 CGCGCGAGTCAGAATGGCGTTGCGGTTCTTCATCAGCATGAGCAAGTTCAAACATCGGT  
 CTAGCCAGCTATTTTATCGACTCCAAGATTTGGGTAAACGAGCTGGCTGGCCTTGATCGT  
 ATCAACATTTCTGAGAGTGAAGTTGCTGGTCGTGACGTATTAGTTCTGCCGTTATCTGAT  
 CTGACTTTAAGCATCGATGCGAAATACGGCGTGGTTTTTGGCTGCGGAAGACAGCGATGAA  
 TCAGTGCGCGCGGTATCCGTGGAGTTCTTGGACCAGTGGGTAGATGAAGAAGAACCCCCA  
 GCGGAAGAAGTGCCTAAATATACGGAACACAGGAGGAACCTCCCTCACTTGAGATTCCCT  
 CCGGCTCCTTCCGGAAATCGTAATCTCCGAGTTCTGTGCACGTGGGGAGCGATGGAAGGA  
 ATTATTCTGAGTGGAAACCCGGCGATCAAGTTTCACTGTTTTTGTCTTTTCGACCTCGAC  
 GATCCGCCGTTCGAACAGCTCAAAACCACTCGTCGCGGGTACACCGAACCTGGCGAGATT  
 TATGGAACACAGCGCAGCTATAAATTTACGCTGATGGTTGGAACGCTGTTATTTCCGCC  
 AAAGTGCCCACTGCGCACCGAAGAAACCTCACCGGCTACTTCACCCACAGCTCCTACGCG  
 GACACGAGCCGCCGACGTCAGCGGTCAACCGCAGTCTACCGCCACGGTAAGGACGCA  
 ATTATCGACGTGACCCCTCGACGGTGCGAAACCTCCTAGATATCAAGAATCCTTGGATTGG  
 AGCAGCACCACTGACCTGTGACGGTGAAACAATCTGGCTGTCCGATAAGAGCTTGCCCTTC  
 GTCCGCGGTTTCAATGTCTCCACAGGCAAGCTAGTACACGAGATCTCCATACCCACCTTC  
 AATGAGATCGCCCTCGAATCCGGCAATAGAGCCCGCGCAGCGAAAAAACTTTGGGAACCT  
 CCAGATCTTAAAGAGGCAACCGACCCTGTCCCAGCGATCCCCGCGGGCTGGAAACTACAC  
 AAAAGATTTCGGGAAAAAACTTCCATATCGTAAGCGCTGACAACGGAACCTGGAAACAAACC  
 ATCCTTAGGATCAAACCTTCAAAGCAATTGAGCTTGATCTTGGATACGCCAAGATTTTCG  
 ACGATTTACCAATACGGTGAACGAATTTATCTGCGTTCCGATCTTCACCAGATCACGTTT  
 AATCAGGATCTTGAAATCCTCAGTGTAGAGGTCCACGGAAATCCCGATGCAGGTTATTGG  
 CCACTTTCCGATCTTCCACCAGGGGATTCTCCAACGCTGGGATTTCCTATCGGATCACTC  
 ATGATGTTCCACGAACAACAAGATATCTACGCTTTCACGATCCTAAAACAACAAAGCAA  
 CTAACAACGTGTAACCTTGCCCAAAAGGAGTTTGAAGTGGAATATGCTTCTCAGAACAGA  
 ATTGTTATTTCCGTGAAAAATCCAGAAAGCCGCTCATTGACAAACTGTTGGTGTGGGAA  
 CCACAAACCAAGGTGGCGGGAACAAACCTGGAGAGC

>RXA01384-downstream

TGAGCACGGTTTGATTAAACGTCTG

>RXA01390-upstream

CGTCCAGATAATCAATCTGCGAAGCCAGTGGCTTCCGAAGCTCCAACAACCTATTACGCCG

GCAAGCTCTGGTGCATTAGCATCCGATGCTCCGACGTCTT

>RXA01390

ATGTTTCAGGCGCAGCCTTCCCAGCAACAAGACATCCTCAGCAAGTTCCGCCAGCTCCGCC  
GACACAAGTTACTCAGTCAGATTAGGCCGTCTTGAAGAGCCTGGTTACCAGCCAGAACCG  
TCTTATTCGGAGCCTTACACTGACTCTGATTTCGCGCCAGCAGGTGCGGCCGCTGCGGCA  
GCTGCAGTAGCTCCACCAATGATTGCGGAACAGCCACAAATTGTTGAAGATGCCCGCCGA  
GGTACCCTCGATTTCGGCCTGTTGATTATCCGCGCAGTCATTGGTGTCTATTTGATCGTC  
CGTGGAGTCTTTACATTCTTACCCCTTGGAGGATCTGCCGGTCTTGCTGGCCTCGAGGCA  
GAGTTCGCTGGTTACCAGTGGCCTGAAATCCTCGCGATCCTGCTTCCATCTATTGAACTT  
GCGGCTGGTGTCTTCTGCTCCTTGGTCTGATGACCCAGTGGCAGCAGCGGTAGCCACG  
GTGGCGACATCCTTTACCACCCTTCACCAAGTCAACACTCATGAAGGTGGTTGGGGTGAA  
CTTAGTGAGCCATTGATGCTGGCACTGATCCTCACTATCGTGGTTGTCCGACTTCAGTTC  
ACCGGCCCGGCAAGATTTCCCTTGACTCTGGCCGAGGTTGGCAAAGCGTCCACTGG

>RXA01390-downstream

TGAGCTCGTGGATCTTCGTGGTC

>RXA01391-upstream

ATGGTGTGAAACCATCATGGCTCGATCACAAAAAGAACACCTGCTATCAGGTCAACCAA  
AAAAGTTAAAGTGTAATATCCAGCATCATCACGATTGCC

>RXA01391

GTGGCTGCAGTCGCTTTTGCAGCTTACGTTATAGATGGTGGGGTAGAAGAGGCGTCTGGA  
ACACCGACGTCTTCGGAAGCTCGGTAGCGGCAACTGCTCCAGCGGCATCTAGCGAGACT  
GCGGCTGAATACCGTGCGATGCTCGCTTCCCTTGACGTTAAAGGTTCGTGCGCCAGGAACA  
GGATATGACCGCAATTATTCGGACCAGCATGGACCGACACTGTTCCGTGGAATATGGA  
CACAATGGCTGCGATACCCGCAACGACATCCTGCAACGCGACCTGGATGACATCCAACCT  
CGCGAAGGCACCAAGGATTGTATCGTACAGAGCGGCCTGCTCAGCGATCCATTTTCTGGC  
GAACTTATTGATTTTCGTTTCGCGGTGAACGTTCCGCGCAGCTGCAGATCGATCACCTGGTC  
CCATTACATGACGCATGGGTCAAGGGAGCACAGCAGTGGGATGAGCAAACTCGAAAGAAC  
TTTGCCAACGATCCCGACAACCTTCTCGCCGTTAAAGGTACGCTTAACCAGCAAAAAGGT  
GCAGGCGATGCAGCAACCTGGCTTCCACCAAAACACAGCTTTTAGGTGCGATTACGCAAAG  
AAAATCATCACCGTTAAAGATCGCTACAACGTGTGGGTGACTGAGGCTGAAGCAAGCGCC  
CTGGAACGCCAATTAGATACGTGTGCTGCA

>RXA01391-downstream

TAACAGTCACATAAGCATTTGGG

>RXA01396-upstream

TCACCAACCCACTTAACTTCGAGACCTTCGATTCCCTCGTCGTTCCAGTTGGTTCTTCTG  
CAACCGCTGAGATCCAGGCTCAGCTTCAACCTCCCGCGTT

>RXA01396

TTGAAGGCTTTCAACACCAACTTCGCAGCCACTTTGGCTACCGGAAAGGTTGGCGATATC  
ACCACCACCGTTTTAGTTGCAGGCGATGATGAAGACGCAAAGAACGCTCTTATCACCGAC  
GTCAACGCTGGCGGCCTCGACGCCCTTGACGCTGGTTCCCTCAAGCGTGCACACGAGCTT  
GAAGCAGTTGGTTTCTTGCAGCTCACCTTGCAGGTTCCGAGAAGATTGGATGGACCGGC  
GGATTTCGGCCTGGTCAAG

>RXA01396-downstream

TAACACCCAGCCTCAAAAGCACT

>RXA01397-upstream

TGAGCTGCTAAAGTCTCGCATTAAGGACTGCTTCCCTTCGGGGGAGCATTCTTTTAA  
ACTAATTACTTGACACGTCAAGTAATTAGGGTCTAGTGTT

>RXA01397

GTGTTTCATGATCAAAGAAGCTGCTCAACAAGCTCTTCGGAAACAAGAAGGCTTCCCCGGCA  
ATGACACAATCTGAAACCATTTACACACAAGGAGAACAACAATGACCACTTACACCATC  
TTCCGGCCGCGGCAACATGGGCACCGCAATCGCAGGCGTCTCACCAGGGTGGTGCAACT  
GTAGAACACATCGGTTCTGCAGATTCTGACATCGCAACCATCAACGGTGACGTTGTTATC  
CTTGCTGTTTCTTACCCAGCAGTAGAGTCCATCATTGCAAGCCACAAGGATGCTCTCGCA  
GGCAAGACCGTTATCGATATCACCACCCACTTAACCTTCGAGACCTTCGATTCCCTCGTC  
GTTCCAGTTGGTTCTTCTGCAACCGCTGAGATCCAGGCTCAGCTTCAACCTCCCGCGTTT

>RXA01397-downstream  
TGAAGGCTTTCAACACCAACTTC

>RXA01400-upstream  
GAGCAGCTATCACCTTATGCATCGGCTCCGGGTGAGGCGGTGCCGGTGTCTTTGATCA  
GCAACGACATGTGGGTGCCGGCGAGCGACCGGGTAGTTGG

>RXA01400  
ATGGCGATTAGTGTCTTCTATGCCCTAAGGCGATCAGCCGTGAGGAATTGGAGCGCGCTGG  
CTTGAAGTGATTGAACGGCACGGCACCTTGCGCACAGTATTTAGCACGGGAATGGGTGGG  
GAAGTGCAGCAACACCGCATTTGATGTGGGCCCGGAAAATGGATTGACCACGCCGTGCG  
CCTGGTGAGAGCATTAATGAGGCGTTGCGGGCGGTGTTGAATCGGCAGTGTTCGCCGTAC  
TCGAGGCCATCGCATAGTTTGTGCATTATTGATGCGCATCCGCGTCCCACGGTGATTATT  
GGTAGTGATCATTCGCATGTGGATATGTGGTCCATGCTGGTGATTGTGCGCGATTGTTG  
GCTGCGCTCGATATGGAACCTCCCGTTGAGCCGCCGTGGCGTTTGAATCGCACACCGCG  
GAACCTCTCGCGGCTCCACCTGCACCGGAGCGGATTACACAGCGGTGGCGTGAAATTTG  
GAAGCTGGTGGTGGAATAATGCCCTCAGTTCCCGCTTCGCTTGGCGATGCCATCTCCATG  
CCTGAACGCGTTGAAGTCCCGGACATTTTCGGGGTCAATGGCTTGGCGATTACTCGGCA  
CGCGCCCGCGCACAAACAGGTAAGCTCCCTGGCCTTGACTATTTCACTGATGGCTGATGTT  
ACGGCGGCGCTGGCGGACCTTCCGTTCGCTGCTGTATTCCCAGTCCATAGCCGTTTCGAT  
CAGCGCTGGCACGATAGTGTGCGGTGGTTTATCTCCAATTCGGTCATTGAGGTGCCAGAT  
TCCGATCCTCACACTGCAGCCCAAGCTGTTTCGCGAGGCTGTTTCTTTGGGAAGCTACCCG  
CTGGCTGAGCTGCTTGAACCGTGGGTGGCATGCCGGAACGCCAGGAATGTTTGCTATT  
TCTTGGCTTGACCTGCGCCGACTCCCAGTGAGCATTTGACGATATTGGCCTCCAAGCCCAG  
TATGTCACGCTTCACTGCGCACCGATGGTGTGATGCTGTGGTTATTTTGGATCGCTCC  
GGCGCGCACCTTCGCTGTCTGTTATCTGACTCTTTGGTGGCGCGGAAAATGTAGGCCGC  
TGGATTGATGCGATTGTTGCTCAGATGCGCGCCGAAGCTGGGACGGTGAATCTGCAGGCC  
GGCGGGGAACAGCTGACACTTCGGCATGGAACTCGCGCCGATATTTCCGAGATCGCCCCG  
CTACTTGCCCGAAACGAGCTGACCCTTGTGAGCTGGTGGATCTTGAACATGCCCTTGAC  
CTGCTGACACACGAGTCTTCGCATTTCTCGCGGTGGTTCGAAACGCTCGTGGCAAGATA  
ATCGCAGCGATGCAGTTGACTATTGTTCCGGAGTTTTCGCGCGGTGGTGCCTTCATCTT  
CACATCGAGGGGCCGTTTATTATTCGGAATATCGCACCAACCGATTGGATAAAAAGCTG  
CGCGCCTGGGCTGTGGAGCATGGGCGTGCGCGAGGGGTGAAGGTTGAGGAGGTGGTGGGA

>RXA01400-downstream  
TAGTTGGTTTATTGGCGCCTCGT

>RXA01401-upstream  
TGCCAAACGGAAGGTTTAAATTGGTCTACATGTGTCAGTCTCATGGCACTATAATAGACCT  
AGTATCTATAGATTGATAGAAAATAATTTAGGAAGTTTCC

>RXA01401  
ATGAACTCTCCCTACAAACACAGCGCCTTCCCCGTCCCCGGCGCGCAACTCTCCACCTCA  
TACAGCGACGAACACGGCCAAGCGTCATCCAACCTCACGGCCTCACCTCTCCCGCAA  
CGCGACCGCCTCTCGACCTCGACCTCGGCCGTGGCCTTCCGGCACGCGCCTTTTGCGT  
TACGACGCCCCGCGCCACGGCACCTCCACCGGCCGCGTGCCTCCACCGATTATCAGTGG  
GACACCCTAGCGGGTGACCTT

>RXA01401-downstream  
TAATGCTTCTCGACGCCCACTTC

>RXA01402-upstream  
CGCTGCCTCCACCGATTATCAGTGGGACACCCTAGCGGGTGACCTTTAATGCTTCTCGAC  
GCCCACTTCCCCACGAACAAGTCCACGGCGTCGGCCCCCTC

>RXA01402  
ATGGGTTGCGCCACCCTCCTCAAAGCCGCGGTGTTAAACCCCGACCGCTTCAGTGGATTC  
ACACTCATGCTCCCACCCACCGCTGGGAATCCCGAAAAGCCCAAGCCTCCGAATACCTA  
TCCCGAGCAGAATTCTTAGAAACCCACGGCATGGACGCCTTCTCAACGCCGAAAAACTC  
CACGCCCCAACACCAGCAACCGTAGGAACCCCCGACACAGTCCCCGACATTTCCGCCGAA  
CTCCTCCCCCTGGGCTTACCGAGGCGCCGCCCAAAGCGACCTCCCCCTCAAAGAAAGAAATC  
GCCAAAATAACAGCCCCCACCCTATTCTGAGCTGGACCGACGATCCCGGACACCCCGTA  
TCCACGGCAATCGAGCTAACCCGCCTCATGCCAAACGCCCAACTGCGCATTGCCACTACC  
CCAGCGGAAGTCGCGCGGTGGCCACAACACCTTCGCGATGACCTGCAGTTGGAC

>RXA01402-downstream  
TAAAAACCTTCATTATCTGGTTT

>RXA01403  
CCGATCACCTACATCGACGGCCATCCATATGTCTGATGGCGCGGTTCGGGGAGACCGGCGGT  
TTGATGCTACAGCCGGCCATCGATGCGGGCTTCACCCGCTTTTTCGTTATCGCCTCCCGT  
CCGCGCGATTATTGGCGCAAGGAGATCGGGCGCCCGGGTTTCATCAAAGCTGCTTTACGA  
CGTTTCCCCACAATCGCCGACCTCACCATCGCGCGTCTGCACTGTATAACTCGGTAAAG  
CAACAGATCCTCGACCTAGAGAAACAAGGCAGCGCTATGTGTTCTTTGCGGACAAACATG  
AACATCCAGAACACGGAAATCAATCTGAAGAACTCCGTGCATCTTTTCGATGCAGGCATG  
CAGCAGACCCGCAAAGATTGGCCGGAGATCATGAGCTTCCTGAACCAAACCAGA

>RXA01403-downstream  
TAATGAAGGTTTTTAGTCCAAC

>RXA01405-upstream  
AATTAGACGTCTGTCTCTAGGGATGCCGCATCCCGCCGGCGCTCCTAGAGTCCGTTTGTA  
AAACCTAGAATTCCGAATACGTTCCGAATAGGGTGGGGGT

>RXA01405  
ATGAGTAAGATAGTTGATCTGCGCTATGGGACCCGGCGTTCTCGGAGTTGAGCAAACGC  
TCTGCTGAAGTCTTTGCCGAAGCTGAAGAACATCCCATTACTGTGACACGTCGTGATGGT  
GAAGCGTTGGTATTGATGTCGAGCGCGAAGCTGACGGGCGAGCCCGCTTGCTGGAGTTG  
GCTGCACAGTTAATTACTGTGGCCACTGATCATCAGGGCACGTTAGCCGAACGTATGGCG  
AAAGTATTTCCCGTGGATGCTGGCCCTGTGAGTGGCGGATCGTGAGGCGTGTGCCCGTGAG  
ATTCTTGACGCTGCACGAGCATCGTTTGCAACCGAACAACCTCACCTCGCTCTTACTGAA  
CTGACCTCATGGAAGAAACAGCAGCAGCTGTTGCTGCTGGATTGAGTAACACTGATCTG  
CAGTGGTACGACGATCCGCATCTGGTGGAGCGTCCC

>RXA01405-downstream  
TAAGCGTGGCTGGAAAGAAAAGC

>RXA01409  
GATTTCCCCGACGTCAACGCACGTTTGGGGTATGAATACATGCAGCTGACCCCTCATGTA  
GATTTCCGGTCTTTCTTCCGCCACCCCAAGGCAGACGATGATCTCGTGGCAGCCCTGAAA  
AAGCGTGCCAAGGATGCCGGAGTCACCATTCCTGCACTGTTGCCAGTGCAGCGTATTTCC  
TGGCCGGAGGAAACCCAGCGTGTGTCAGCAGTACGCAACATCAAGCGCATCATCCAGTTG  
GCCGTTGATCTGGAAGTAGACACCCCTCAACACGGAGTTTCTGAGACGCCCAGAACGCTCC  
GAGGATTTCCGAAGATTGCTTCTACCGCTCCATGGAAGAAGTCCCTGCCAATCCTGGAAAA  
GAGGGCATCAAGTTCAACATCGACCCACACCTGATGATTTTCGTGGAAAAACGTTATTGAA  
GCATGGCGAGTCATCCGCGGTCTGAACTCCAAGCAGGTGGGCTTTGTTTACGTGGCACCT  
CACTCATTTCCACATGGGTGATCAGGCTGAGGCAATCCTGCCAGCAGTAGGCGATCGCCTT

GGGGCTGTGTACCTGTGACATACCTTCGACCACCACAAATCCCACGGCCTGCGCTACATC  
ACTAACCCCTCCAGGCAACGCAGTGCAGCTGCACCAGCACCTAAAAATCGGTGATGGCGAT  
GTGAACCTTTGAAGAGATCTTCTCACTGCTGCGCTCTACCGGTTACCTTGACCGTGAAGAT  
GCACTGTTGGTCTCCAACGTGTTTGCAGAAGATGAAGCAGCAGATGAAGTATCCCGCTAC  
CAGCTGGAGAAAAATCCGCTCACTCATCGAAAACGCA

>RXA01409-downstream  
TAGAGTTATCTCGAAACTACCAA

>RXA01413-upstream  
TTTGCCCTATTGGAAGAAGTAAATTCACACCTTCACTTTCCAATACTTCTTTTGGTGAG  
CGGGTTTCTCAGCGTTTAACCATCTGAAACCATCTGAGA

>RXA01413  
TTGACCCATCTGTTCTTAGAAGTCGATGAGCGTTTAGTACTGGGTGTTTCAGCAAGATGGT  
TACCAATGGACTGAGCATTTGTTCCGGCTGCCACTGCAACATCTCCGTAACCTCGCCCAAT  
GACCTGCAGGGATTGAAGATACGATGGTGTGAACCTTTATCCACAACGGGGAAAGATCAA  
GGGGTAGAAGCTTTCGCTCAAGCAACCGTCGTTACCCCAAATAACTTCGAGGCTTCCACC  
CTCTCCGGCCTTGAGAAGCTTGAGACCGTCGAGGACCTCAAGGAGGCTGCCCGCCTCATT  
TATGAGCAAGGCCCCCAGTACGTAGTCGTCAGGGTGCCATGGACTTCCCCGGCGAGAAC  
GCCGTGGATGTGCTTTTCGACGGATCCTCTACCACGTCTTCTCTGAGCCAAAGATTGGT  
GAAGAGCGCGTTTCCGGCGCAGTCTGCACCTTCGCAGCTGTTATCACCGCAGAGCTAGCA  
AAGGGTGCTGAGGTTGTAGACCCAGTGGCAACCGCAAAGCGTGTGGTCACCCGTGCGGTT  
CAAGATGCTGTTGCATCCAACGCACCTTTTACCTCCGTATGGCTTGCTGAGGACAACAAG

>RXA01413-downstream  
TAGAGTTTTAAATACCGATCAA

>RXA01414-upstream  
TATTGCCTAAGTAGACCAATAGGTCTATGCTTCATAGAACAACCTAGTTCATAAGTGATTA  
GTTTTAAGAATTTATTACCTCTCTACAGGAGAACCCAGCG

>RXA01414  
ATGGCCGTTTTTGATTTCCCTAACCCCGTTAACGAATATGCAGCTCGCTGCACTGCGGGT  
TTGGTTGTTTTGCTGAGCGCCGCCACGCTTTTGGCTCTGGTGACCTTCGTATTATTTTG  
GCAAGCATCTTGACCTTCGGCTTCGCATTGCGCGTGCCCGGCGGACCCCGTTACTCCCCC  
TTTGGACGTCTTTCAGTACACGTACTTGTACCACTGCTGAAGAAAGCACCGATCCTGACC  
CCTGGCCCCACCAAGCGCTTCGCGCAGACCATCGGCCTGGGCTTTAGCGGTACTTCCCTT  
ATCCTTATGGCCTTTGGATTTAACGTTGCAGCTTCCGTAGTCCCTAGTCATGCTCATCGCA  
GCAGCCACCTTAGAATCCGTCTTTGGTATCTGCCTCGGTTGCTGGGGATTTCGGCAAGCTC  
ATGCGCTACGGCGTCATCCCAGAAGACGTTTGCGAGCAGTGCTTCCAGAAGGAATCCTCC  
CGCACCGGCTGGCTCGTTAGCCTGAAG

>RXA01414-downstream  
TAGCACTTCGAATCTAAGACCAC

>RXA01417-upstream  
AGCCTCCCCAAGGCTGGTTAGTCCCACTATCCTCTCAGAGAGAAGCAAACTGAAATAAC  
TTCAGCCTCAGCTATCCCCGCAATTTAAGGAAAAATAGGAT

>RXA01417  
ATGACTGACAAGTTTGACAGAGTCCTTGCTGTAGAGGTGTGCATTTCAGGAGTGGATCGAC  
GAGCAAAACCTCAGCTAGAGGTGCCATTAATGATTGCACGTTTGCAGCTTAGAGACGTC  
GCGAAGGATATCACTGCTGTTACGAAGAAAAATTTCTACGACCTCACTGATATCGATACT  
GATGCCTTTGTGAAAAACATCAAACCTGGGATGGAATGAACGCTTGATCAAGAAAAGCCTC  
TTTCCACAACCGGACGTGCATAAACAAACATTTACAGAACTGAACATGGCATTGACGCG  
ACTGTGACGGTCTGGTTCGAAGGGCTTCGATCCGGAAGTGGCCCCGACTTCTTGGTTTCC  
TATGTGGATGGTCTTTGGTCAGCCGATATTAGAAACCGCATCACGAAATTTCAGAATAGA  
GAAATCGTTAGCAAATTTCTATTTTACTCCAGAACATATTAAGGAGGATGGAGATTTCTCC  
GCAGAGATTTTTATTAAACCGACCAGAAAAATGACGACGACTCACAAGATTTGGTCGAGGTG

TGGACTGATCAAGACACCAGATACTGCGGTGAAATGATCATCTATTTCAAATGGCTC

>RXA01417-downstream.  
TAAATTCCACTTTTCTGCATCAG

>RXA01421-upstream  
TTGATGCACGTGCAGAAATCGTCGGCGGTCCGTGGCACCCATCTGTTAAGGGAGACTCGG  
TTACTGCAGGGATCCTGCGAGATCGAGTAAACGCCTAAAG

>RXA01421  
ATGACGTGCAAAAAGCATTAGCGGCAAGCGCCCGAATCTGCCGTCGCTCACTGGAGCGCGG  
TGGCTCGCGGCGCTCGCTGTTTATTTTTTGCATGCGTTGGTGTTTTGTTCGGTGTATCCG  
TTCCAGCAGTCGGAACGTGTTTGCCACAATCCATAAATTGTCCCCATGCAGCTGGGTTC  
GCTGGTGTAACTTCTTCTTTATCTTGTCCGGATTTTTGATCTATTGGTCAAATAGCCAG  
CTCAAGGGCATGAAGAATGTGCTGTATTACTGCAAGCGCCGCATCACCAAGATTTATCCC  
ATGCACTTGATTGCGTTGCCGATGTTTATTGAGGCGTCGGCGAAGTTCACGACTACAGGC  
ATTACCTGGGTGCTGATTTTGC GCGAG

>RXA01421-downstream  
TAAAGCTGTGGCTGCGGAATGCG

>RXA01422  
TTCGGTGACTCCCACACCTCTGGCACCAATGCTCCATTCCGTACCGATGAGCGTGGCTGC  
CTCAAGGGTGCAAACAACTGGGCAGATCAGCTGCAGTCTCAGCTGGGACTTGGCGCGGGA  
GACCTCATTTGATGTCTCCTGCTCCGGTGCATCGATCAACTCTGATGGATTCCACTTCTCT  
GATGAAGTCCGCCATGCTGAAGCTCGTGGCGCAATCGGCCCCAACACCACCGATATTTTT  
GTTTCAGTTGGGCAAGAATGATCAGTGGGGCCTTTCCAATGTGAACCTTCTGCAGTCTGTT  
CAGACCTGCTTGACTGATGTGTTTCGCTGGTTGTGGCGATGCTGCGGTTGCTGCTGGCAAG  
ATGCAGGATCCAAATGCAGTTACTGCTGAAAATATGCAGAGCGCATGAAGCCAGTCATT  
GACTACTTGAAGTACTACGCACCAACGCAGAGATCACCTTGGTTGGTTACCAGGAATAC  
ACCGCTCGCAGCGGAAGTCAGGTATGTGTTTCGCTTGGTGGAACCCCACTGGTGAAAAAT  
GATGCACCTGCGCTGGTTTTCGTTTCATGAACAAGTTGGACATGGCGATTGATGGTGCTGCT  
GGAATCCTCGGCGTCAGCCACGTTGATCTGCGTAGCGCGACTGAAGGGCACGACAGCTGC  
TCCAACGATCCTTGGGTCAACGGTGTCTTTGATGCACGTGCAGAAATCGTCGGCGGTCCG  
TGGCACCCATCTGTTAAGGGAGACTCGGTTACTGCAGGGATCCTGCGAGATCGAGTAAAC  
GCC

>RXA01422-downstream  
TAAAGATGACGTCGAAAAGCATT

>RXA01425-upstream  
AGTCCCTATTAATCCCAAGGAGTTTCGACTCACAGTGCTCAATTTCAATTTATTGGCCAAT  
TTTCGGCCATCTGTGGTTCTGGCATAAAGCGTTCAGCTTT

>RXA01425  
GTGCTGAGCCCAGATTCCGGAATTACCTGGGCCTTGTCGATCATGTTCTTGACCTTCACC  
GTGCGTATGGTTCTGGTCAAGCCGATGGTCAACACCATGCGTTTCACAGCGCAAGATGCAA  
GACATGGCTCCAAAGATGCAGGCCATCCGCGAGAAGTACAAAAATGACCAGCAGAAGATG  
ATGGAGGAGACCCGCAAACCTCAAAAAGAAGTGGGCGTTAACCCCATCGCAGGCTGTTTG  
CCAATGTTGGTGCAGATCCCAGTGTTCCTGGGTCTGTTCCACGTGCTGCGCTCCTTCAAC  
CGCACCGGTTCTGGCGTTGGCCAGCTGGAAATGACCGTTGAGCAAAACGCGAACACCCCCG  
AACTACATCTTCGGTGTGACGAGGTTTCAGTCCTTCCTGCGTGCAGACCTGTTTCGGTGCG  
CCACTGCTCGTCTACATCACCATGCCTGCTGACGCGTTTCGACGCGTTTCCTTGGCCTGGAT  
GTCTCCCGCCTCAACATCGCGCTGGTTGCAGCTCCAATGATTTTGATCATTTGTCGTGGCA  
ACTCACATGAACGCGCGTCTGTCCGTCAACCGCCAGGAAGCTCGCAAGGCAGCCGCGCAAG  
CAGCAGGCCGCTTCAGCGATCAGATGGCCATGCAGATGCAAATGATGAACAAGATGATG  
CTCTGGTTTCATGCCAGCCACCATTTTGTTCACCGGCTTCATCTGGACCATCGGTCTTCTT  
GTCTACATGATGTCCAACAACGTGTGGACCTTCTTCCAGCAGCGCTACATCTTCGCCAAG

ATGGACGCTGAGGAAGCAGCTGAGGAGGAGGAAAAGCGCGCAGCAAAGCGCACTACCGCT  
CCAAAGCCTGGCGTGAAGCCAGAAAACCCCAAGAAGCGTAAGAAG

>RXA01425-downstream  
TAAAACTTCACTAAAAACCGCCA

>RXA01429-upstream  
GGTAAGAAGAAGGGCAAGCTCGTGTTGGAATTCGGCGACAAGGATGATTTTCGAGCGCATC  
ATGTCCTTGATCCAGGGCCAATAATTTTAAGTTTGGCGCC

>RXA01429  
ATGCTCCAGGCTTCCCTTTTCCCGATCGTGCAGGAACACATAGATTTCTGCACCCCCAG  
GCCCCGAAGTCGGTGTTTGGGAGCTCGCACCTGAGGTTGCAGCTAAAGCTGATCCGGTG  
TTTGAGAAGGAAGCCTGGCTGTCCACCACGCTGCTGGAATATGAATCCTGCGGTTTCAAC  
ATTGGTTACCGCAATGGAACCTCCGGCGTTGGCGTCGGTCATTTTCTGCGAGCGCGATGCC  
GCCCCGGGCGCGAAGGCGCTGCCACGGCACCGGTGTCTAGCGACGCTGCGATCATCAGC  
AGCCTGTTTCATCGACGAGGTTTCCGGGGCACGGGCATGGAATCGGCGCTTCTCGACGCT  
TCCCTCATGGAACCTCATTCGGCGCGACTACCCAGCCGTTGAGGCGTTTGGATACCGCTCG  
GAAAACACAGAAGCGGATCGCATCGCAGCTAGGCGTTTAGAAATCGGCCTGATTGATGTG  
GAGGCGTTAGAATCAGCCGGTTTTCGAAGTGGTTGCTGACCATCCCGTGTTACCCCGTCTG  
CGGATGGAATTACCACCCGCAACGGTGCTGCTCACAGCTAAGGATGCCAGCGACTCCTT  
CAAGAGATGGGCGCGATT

>RXA01429-downstream  
TAGCCAGCCTGCTCTGATTGCAA

>RXA01434  
GTCACCGACGGCAACACCTCCACCGCATGGACCTCCACCGGCGGCGACGGCCTCCTAGTT  
GACCTGTCCACGCCTGCCCCCTCGACCGCGTCATCTTGACCACCGGCACCGGCTCCGAC  
AGCAACGTGACCTCGACCGTGAAGATCTACGCATTCAACGACGCCTCACCACACTCCCTG  
TCGGAAGGCATCGAGATCGGCACCGTGGATTATTCGGCCCGCAGTCTCAGCCACAGCATC  
CGCGATTCTCCAAGCTTCCGGGTGAGGTGGAATCCGTGGTGATTCTGGTTCGATGAGGTT  
CGTTCTCTACAAACCTCAGACACCAATCCACAGATGCAGATCGCTGAAGTACAACCTTGTT  
GGTTGG

>RXA01434-downstream  
TAAATTACGCGTTTGTGATTGAC

>RXA01439-upstream  
GTTAATCCACAGCGCCCTGTGTGCACTCTATTAGTGAATATCCGGTGAATGCTCGTCCCT  
CGACTGTCTACTTAGTAGGTTTGCAGGCTAGTCTTTTGTG

>RXA01439  
ATGACCCGATACTTTGCAGTTTCCAATCTTCAGGAGCTTGGCTCCCTCGAAGTACACAAA  
TTGTACAAACTTCGTGTAGATATTTTCGTCCACGAGCAGCAGACTCCGTACGCGGAGATC  
GATGACACCGATGCTGCCCCAACCAACATCATCCTGGTTTGGGAGCGCGCCGACGCC  
ACCCCAACCAACCTCATCGGCTGCGCACGCCTCGCGCCCATCACCGCCGCGGAGCTTAAG  
GCGTACACCGGCAAGGGCATTTCGCTTGACGACGCCACCCCGCTCTCACAACCTCGGCCGC  
GTAGCGGTGGCACAGGAAGGGCGGGGCTCGGGGCTCTCAGGTGAGCTCATGCGCAACGCG  
CTGCGTCTTGCAATATGAGCAGTACCCGACCGCGATGTTGTCCTGACCGCGCAGAAGCCT  
TTGGTAGATTCTACGCAGAATACGGCTTTGAGGTCTTGGGTGAGGAATACCTTGACTCG  
GGTGTTCCTCACCTTCCGATGTTGCTCAAGGCTGATGAGCTTGAAAGGTTCTCAGACCTA  
GACGCC

>RXA01439-downstream  
TAATCCGTAGTCACTGGAACCTCA



>RXA01440-upstream

TTGATGGAACCAACCCTCAGCTGACCACGCCTCAGGGGAATCAGTATTGGGCAAACACAC  
ACGATTTTGGAGCCGGCACACACTAATTTTAGGAGCACTG

>RXA01440

ATGAAAACCAAGTGGTTAGCGATCATTCATTTCGTGGCGCTTGCGGTGGTTGCATGCTCT  
GATACGCAGCCGCCGGTTACAGAAACAGTGACAGAAACCGCCCCGCAACCTACTTCTGAA  
ACGGCAGCGCAGCCACCACAACCCACGACACCTGCGGAAACGACCACGCAGCAGGCAGAA  
GGTATCAACTTGACGCCTCGCTACACTCGCCAAAATGTGGGGCACTTTTCCAGTGGTTAT  
CAGCCTGGACAGGTGAGTTTTCCTCAGCTGATGGAACCATTAAATGTGAGTTTCGCCCC  
ATGGAACAGGACGCACCTATCAACCGGGAGCCCTCCACCGATTGGCGGTGAGTTTCGTG  
CAGGGTGCGTGCCAATTCGACGATGGTTACGTAGTGGCGGATACAAATGTGGAAAACAGA  
CCAGGTTTTGCTGAGTACACCACGGCGATTTCTCATGTTCATGCCGAAAATTACACCACG  
TTGCCGCCGGGAACCTACATCGATTTACACACCATGGCTTGTTTCACCGAGTCTGCCGAT  
GAAATTTCTCTGCATTAAGTACGCGACCAATGAAACATTCCGCATCAGCGCGCAGGGTTTT  
GAGATGCTCTCAAATGCCCAGCGCGACGCGGAACCTAACACACAAGGTGGCTTGTACCAG  
GCATTTTCCAACATCGCGGAATTACGGTTCAGTGACGGCAACGCCATGTCATGTTTCTTT  
GACGCCCGGGATCGCAAGATTTCTGGTGCCAAACACTCAGCACCCCCGGCTGGGACGAC  
GGCAGCAACCTCATTCATTTGACGGTCCACGGCGGAAAACCTCAGCCTGATGGGCACCCAA  
GTGGGCAACCCCGCCTCGACTATTTCCGCGGCCGCCAGCTCATTTAGGGCGCCAAATTCG  
CTTCTCGACGCCTCCCTCTCCGTAACACTCGACGGCGATCGGGTGCGTTTCCGCACCGCG  
ACCGGCGAGGAGATGTGGGTGAGTTCCAGTGACTACGGATTAGGCGTC

>RXA01440-downstream

TAGGTCTGAGAACCTTTCAAGCT

>RXA01441-upstream

TTATAACAATTAGCCGTGAGGGTATTAATCAAGGTTTCGGGAGACTAACGTTTTAGAAAC  
AAGTGGAATCCAGCACACCTCGTGAGATGGCAGGTTTCATC

>RXA01441

ATGGCTAGAACGACAACAGCGCACGCAGTTCTCATGGCGCTTAGTTTCAGTCGGGCTTTTG  
ATGCTCCAGGCCTGCTCCGAACAGGAACAAACCCAGAAACAAACGCCAGCGCCACCCTG  
ACTTCGCAGGCTCCCGAGACTCCTCAAGCCTCAACAACCTCCTCAGCAAGCTCCACAGCA  
ACTCCCATAGCAACTCCCATAGCAGCCACCGAGTTGGATTATCTCCACATCGATCCAGCA  
ACGTATGACATCGGTGTCCAAGACCAAGAACTGCCGTATTTACCACTGGCGATGGGATC  
ACAGCGCAGTGTTTCTTCGAGGCAACACCGGGGAGACCAGCTATCAGATCAAGGAGTTT  
GATTTTCGACGAACTGCGGGAACGTGCGCTTTTGGTGATCAACACATCAGCGTCACCACG  
GATGAAAATGTCCGGGAACGCTTTTGCCGAATTGAGTGAAACCGAAGAAGATTACCAGAA  
GCGCAAGCGACTCTCGATGTTGGTGAGATGGTGCATCTTGGTCACATGGGTGTTGGGCG  
CCGAGTGATCGGAGTTTAGTTGTCTCGATTTTCGCTCCAACCAGGCGTTTACCATGAAT  
GAACAGGGCTTCCATGAGCTTGATCTCGCAAAAGCCACTGAGCAGCTAATTAATTTCGAGT  
GGCCAGGTTCAAACGTTATCGAAAATGACGAATTTCCAGTTTACCGATGGCACCAGCATC  
ACCTGTGTGAGTGAGTTGCAGGCGGAAGAGTTCTTGTGCCACAACAGTGGTCCTGGAGGC  
TGGTCAACTTCAGCTGGCCCTGCCAACACCCTGTGGTGGAATCTGAACCAGGCCGACTCC  
GAGTTTGAGGGTGCTCGCCCCACGAATCCAACGCAAAGCGTTTATAAATCTCAACAAATA  
TTCGGTCCGGGATCGTATCTCCTCGCGAACGGTGTGAGTGCAGAATTTGATGGAACCACC  
CTCACGCTGACCACGCCTCAGGGGAATCAGTATTGGGCAAACACACACGATTTTGGAGCC  
GGCACACAC

>RXA01441-downstream

TAATTTTAGGAGCACTGATGAAA

>RXA01445-upstream

GAGTCTCGAATGTATAACGAGTTTGTTCCTAATAACTTTATCATTAACCTATGCCTGCAAT  
AGGCTTGGGAAATTTTGGCATCCAGGTAATCGCGCTGTCA

>RXA01445

ATGATCCCACCTATTAATGTACGTTTTCCTGTTGCCGCCTTACCTCTCGCATTAGTGGCG

ACTGTATGGCTTAATGCTTGGGCAGACCATCTTCTCCTAACTGGTTTTATTGTTTATCTT  
GCTGTGGAATACGCAACAAGCCGTGGGCGCTTCGCTCTCGCATTGATTTTGGGAGTTGAA  
TGGATCTTAATTGCTTATGGGGTAGCTTTGGAAAGGCCTCTTGAGGCTAAAGACTCTCCA  
TCTCTCATTACCGAAATTTTGTCTACTTGTAGCAGCTGGCACAGGGGCAGGTCCGTGG  
AAAATTTTGAGTGAACGCAAGCAACGTGCAATTACTCAGCAGGAAATCATCAAAAAAATC  
CGTACTGATATAGCGCACTATTTGCATGACAGTATGGCAAGATCGTTGGCAATAATGATA  
GTTCAATCAAAGCTGACTGAACTAGAGCCTGATCCAAAAAAGATTCAAGAAAAACTAAAC  
AGTATTGCCAAAATTGGACAAGAGGCAGTGGCTGATTTGCATCAATTAGTTAGACACCTC  
GTGGTCGAGGAGTCTGCTGAAAAAGCCACAGCGTTTGGAGCATGGGCTGCAGTTTCTATT  
CATGACACGGTTAATTCTGCCATTCAAGTTATTAGTAGATGCAGGACATGTCGTTTCCCTT  
GACAGTAGAAAAAGAAGCTATAAGCTGGACCATAATTGCTGAAACGGCGTTTGTCTTAGCC  
TTCAATGAGGCAGTCTGTAATGCAATTAAACATCTCCGCCCAAGGCAAACGTTACTATT  
CGCATAACAGAAAAAGCACAGTCTCTTCAGATTCTAGTAATGAATCCTATTGGAGATTGG  
CATGCAAAATGGGGAGTCCGCAATTCCAGGTGTGGGCATTGGCGTAGAAAGCTTAACCAGA  
AGGATACGTAATATTAAAGGACAGGTCTGTGTGACTTCACTGCAAGGATACTGGAAAGTA  
GTTATTTCACTACCTTTGAAATGTGAGGATTCT

>RXA01445-downstream  
TAAATTGTCTCTATTGTTGAAC

>RXA01447-upstream  
TCCATGAAGTTGGAGTATGCACGCGTGTGCGCACACAGACGTTATTTTCATCTTACTATCC  
CATGTGAGGTTTTTAATCATCGCGATACTAAGCTTGCGGT

>RXA01447  
ATGCGTCTTCTGGTTTTGCGGTGCGATGCCCCACACATCAACGAATTCCTGCCCTTTCC  
ACCTCTGTGGAGATCCACGATTTGCCTGCGGTGCCCACCCGAAAAGACCTCAAAATTCCTT  
GATGATGTGGCCTTTGATGTGCTCCCTCAGGATCCCACGCCTTCTCTCGATGAGATCGCC  
AAGCAGCTGATGTGCGAGCATTTGAGCAGCCCTAAGTTTGCGCCACAACAGCCTGAAACC  
CGTTTGCGCATCGTGGTGATCGGTTTCGGATGCAGCGCTGTCTGCGGTCCTGACTCGTCTC  
ATGCGCGCCGATAATTTGTGGGCGGAGATTGGATTTCGTGCCCGTTGGTCCTTCAACGGCT  
GCGAAGAACTGGGGTCTGCCCCCGCATGAGGCTGCCGCGCTTGAGCTCGCACTGACCGGA  
TTGGTCAATCCTGCCCGCTCATCCGCGATGACGTTGCGGTGCGCGTCGCCGTTTCAGCC  
ACCATCACCAACTGGGAGCCGGGTGAGATCAACGGCGAAGTCATCGTCGATGATCATGTT  
CTCATCCGCCACGAGGCTGCCTCGAAGGCCCCACGCCGTGGCGTCTACGGTGCCCGCTTG  
GTGCCGATGCTTGACGCCCCAGGCATCGCTGCGGTCATCATGGACACTCCCCTGCCCGGC  
GAGGTGCCCTCCCGCAGCCTGTTCCCTCGCCCCCTCGGGCTCGGTTATTCCAGAGAGCTTT  
TCGACGGGCGGTGCCATGCAAGCCGGCGGCCCTCGCTACAAATCCGGGTTGACGGAATT  
TCCCGCAAACGTAAAGTGAGCGCGTTACCTTCTATCGACATTTGCGCGATCTCCAAATC  
GTGCGGCCG

>RXA01447-downstream  
TAAAAACAAGGAGCCAGCATGGCA

>RXA01448-upstream  
GCCTCGTTTGTTCACCGGCACCGTTGGTGAGTAATCAG

>RXA01448  
ATGGCCATTGGTGCCATTTTGTATTGCCACGATGTTCCCGCCAGGTGATGGTGGAAGCATT  
GACCGTATGATCGACGCCTTCATTGGTGCGTGGGAATTTTGGTCATCGCACTTCTT  
CCCTCATCTCCTCTTGACGCAGGCCGGCATCAAGTGGCCAACGTTTTGGGGATCGCAGCT  
AGTGTGCTGGAAGACGTGGCAGCTTCCCTAAAAGCCAAGGATGCAGCCAAACTCAACAAT  
GCTTTGGAAGCATTGAGAAGGTGCGAGGCGTCGGTGAACAAGCTGGAAACTGCGGCATCT  
TCAGGCAAGGAAGCAACCACCGTATCGCCATTTTTATGGGGAGATAGGGCCCGGTGAGA  
TCGCTGTATCGCATTCTGGCGCCAGTGGACAACGTCATCCGAAATGCTCGAGTCCTTGCG  
CGACGGGCAGTGGTGCTGACCGAAGACAATGACACCGTCAGTGATGAACAAATCCACGTG  
ATTGAGGAAATCGCAGACATTGCACTGCGACTGTCAGACCTTTATGAGCACCACAAAGAA  
ATCAGTGAAGCACTGGAAATTCCTGAGTTGGTTAACCAGCTGCGTCAACTGGGCAGTGAA  
GTGGGCGAGGACATCGCCGAAGATCGAGTGCTATCCGCACAAGTAATTTTGGCGCAATCG

CGATCCATCATTGTGGACCTGTTGCAGATCTGCGGCATGTCCAGGGAATCTGCGGTGGCA  
GTGTTGGTTCCGACCTCAGAGAGTCCGGCTTACCTCCGGAGCTGTGGGATGACGAAGAC

>RXA01448-downstream  
TAGCCTTTTATCGCGGTCGGTT

>RXA01452-upstream  
CCGCCAAGAAGGTAAGGACTACGTGATGGTCGATGGCGACGTTGTGGAGTTCCGGTTTAA  
CGTCTAGCGTTATTGACGCTCCTCGTTATACGCTGGTCTC

>RXA01452  
GTGATCAGATCGTTTCGCCGACCGCGACACCGAGTTGGTCTGGTTGCGTGAAGGTGCGAAA  
CGCGTCGATCCGCGAATACACAAAGTGGCGAATCGGAAGCTGCATCTGCTGGACGCGGCG  
ACGACCCTCGATGCTCTGCGTGTGACTCCGGGGAATCGCCTGGAAACGCTCGAGGGTGAT  
CGAGTCGGTCAGTACAGCATTCGAGTCAACGACCAGTGGCGGATCTGCTTCCGTTGGAAC  
GACTCGGGCCCCGAAAACGTCGAGATCGTGGATTATCAC

>RXA01452-downstream  
TGAGGAGGAGACGATGGCTCAGA

>RXA01456-upstream  
AAGACAATATCCTTATATGTACGTGATTATGCGTTTCTCCCCCACTCTACGGTTTAATCA  
CCTATAAAGGCCAACAAAGTAGTTCACAAAAGGAAAAAATT

>RXA01456  
ATGAACGATTCCATTTTTAGTCCCCAAGCACTGAATAAAGCGATGCTCGAAGCCGTCGAG  
TTTATCCACGCCGAAGGTTGGGACGCCGGCCCTACCCTGTTTCGCATTGGTCCCCACTGAA  
ATGCTGGTGGATACTCTTGATGAGGCAGCTGACGACTCCCCACTAACCTTGTGTACAG  
GACAACCTCCCTGACAACCTTGCTGCCAGGTTCCGAAGCGTTAGGTGACTATGTGTCCCGT  
TTGGCGTGGCCAGCAGAGATTGCCGGCGCGGTGTTGGCTCAGGAAATTATGTTACCGAT  
GCTGCCGTTGCAGGCTCAGAACCACGACCCGCTCGTCTTTTTTCCGGCGTTTTCGCGGC  
GAAGCAGAACTCACCTTCTGCAGCTTCGCCCCACCGAAGAGGAATTGGCAGAACGCGGA  
CCGTTTGCTGAAGATGAAATCGAACTGCGCGGCGGCCAGGGTTGCACCGGGTGTAATC  
GCAGCACTGCGCTACACCTCGAAGCGGACCCAGACGAAATC

>RXA01456-downstream  
TAAAACTGACTTTTCGTCCAGG

>RXA01457-upstream  
GAAGCGGACCCAGACGAAATCTAAAACTGACTTTTCGTCCAGGTTTCGCTAGGATAAATT  
AAGTTAACCCCGCCCACAATTTATTTGAGGAGTTCACACT

>RXA01457  
GTGGCGTCCACCCGCACAAGCATGTCCGCGTTGCACTGGGATTAGTGGCGCTCATTCCT  
CTTTTAGCTGCATGTACGGGCGGCGGATCCACCGAACTTCCACTGAATCCACGGCAGAA  
ACAACCTCTGCGACAACAACGGAAGCAACGACAACCTCTGCTACCACTGCTTCGTCTTCA  
GTAATTGAAACGACAGAGTCAAGCACTGCCGAAACGTCGACGAAAGAGAGTGGGGAGACG  
TCGACAAGCAAACCTCGTATGACCAAGGACGTTGAAGTCGCCATATAAAGCTTCTCCTCG  
CTCGCGCCCGTCGAGCTTTTTGAGCAATTTCGAAACCTGCGACCCGTCAGGGGTCGAGGAT  
TCCTTGCGTGAACGGGCGGAAGTTGGCCAATTCCAATTCTTTGACAATGCGTCGAAG  
GCCACGAGCAGCAGCAGCTGCTACGGAACCTGCGCAGCTCACGCGTGGTTGAGGATTCC  
GGATCCAAGGTTGTGGGCTGGACCAGATTGGCACGATGTCGATTATCACGGTCGTTGAT  
AATGACCAAGGCCCTAGTGTGCTGACGAAATGGTGTCTCCGACAAAATCGATCCGGAGGAA  
CGCATCTACGAACTTGGGCTGTGACACCGAAGGACACTGAAGAGTCCTCGGAAGAAACC  
TCAGCGTCTAAAAAC

>RXA01457-downstream  
TAGCCACACGTCTGGAAATCAGA

>RXA01459-upstream

GATTTCGGCGATTACGAATATCCACCCTACAACCTGTGTTCGCTTACAGCGTTGTTTCGGA  
TCGTAGCAATAGGAAATAGTTGCCTTGTAGATTGGTAAAT

>RXA01459

ATGAACTCTAATGGCTTTGGTTTCTCTTTTGGCAACAACGATGACGACGATGACAAAAAC  
CGCAACAACGACCCATTTCGGCCTTTTCGGTGGCAACTTCGGATTTCGGAGGACAAGGTGGC  
GCTGGTGGCCCCGGCGGATTAGGCGATATTTTAAACCAGTTCGGCCAGATGCTGTCCGGA  
ATGGGAGATTTCGATGAACCTCCCCGAAGCAGCAGGCCCGGTTAATTATGATTTAGCAGCA  
CGCATCGCCCGCCAGCAGATTGGTCGCGTAGCGCCGGTGAAGGATTCTGAGAAGGAAGCA  
GTCGAAGAGTCCCTTCGCCTTGTCTGAACCTCTGGCTCGATAACGCCACCCAGCTCCCCACT  
TCCGGGCACCGCGTCGAAGCGTGGAATCCAGAAAACCTGGTTAGAAAACACCTGCCTGTG  
TGGAAGCGTCTTGTCTCCCCGTTCGCGGAGCAAATGAACAAAGCCCAATTAGAAAACCTC  
CCTGAAGAAGCCCGCGAGATGATGGGCCCGATGTCTTCTTTGATGAACCCATGTCTTCG  
ATGAACTTCGGAGTTCAATTAGGAAATGCGCTGGGCGACCTCGCAAAGCAGACCCCTCACC  
GGCTCTGACTTCGGTTTGCCTATCTCCCCAGTCGGCGTATCTGCCGTCTGCCCCGGCAAC  
ATCGCCGAAGCATCCAAAGGCCTCAACGTGGCACCAGCAAGAAATGCTCGTTTACATCTGT  
GCCCGCGAAGCCCGCCCAACGCCTCTTCAAGCACGTGCCGTGGCTTGTTCGAGCGCCTCG  
TTTCTCCTCGTTGAGGAATACGCCGTCGGCC

>RXA01459-downstream

TAGAAATCGACACCTCACACATT

>RXA01460-upstream

GCAACATCGCCGAAGCATCCAAAGGCCTCAACGTGGCACCGCAAGAAATGCTCGTTTACA  
TCTGTGCCCGCGAAGCCGCCGCCAACGCCTCTTCAAGCAC

>RXA01460

GTGCCGTGGCTTGTTCGAGCGCCTCGTTTCTCCGTTGAGGAATACGCCGTCGGCCTAGAA  
ATCGACACCTCACACATTCAAGAGGCCATGGGCAACTTCCAAATGGACAACCCAGATCCT  
GAACGCCTCCAGGAAATGATGAACGAACCTCAAGGTATGGACCTGTCCCCACGCATCGGA  
TCCCGCAACGCCAACGCAGTATCCCGCCTGGAAACTCTCTCGCACTCGTTCGAAGGCTGG  
GTTCGACATCGTAGTTACCCAAGCCCTGAGCGAACGCATTCCATCACCGACGCCA

>RXA01460-downstream

TGAACGAAGCCTGGAAGCGCCGC

>RXA01463-upstream

ATTAGAACAAATATTCGTTAGAACACTTGTGTTTGTGTTGATTGTGTGGTTAGGGTGGGTG  
CTAATGAGTTAAAAAGGGGAAATTTAAACCATTAGGGGGC

>RXA01463

ATGGAAATGTCATACTTCAGCCATCAGGACCCAAATAATCCAGAGAGTCACATCAACTTC  
ACCATGGCGCAAATGGAGATCCAGCGCTGGACTTTGCTGATCTCAAACCCAGAGGCGGAC  
GCTAGCACTCTTGTTCATGGAGTTGAAAACCGTCACGGGGGAATCCAAGCATTTTATCAAC  
CAGGCTATTAAACGCCATGTGGGCTTTAATGAAGCTGCCCATTTTAAAGAGTGGTGGTAGAA  
ACTCACTTCACGTTTCGGATTCCGTACCTGGCCCCGATTTATGCAGGCAGTCAAGCAGGCT  
AAACCGGAGTTGTGGGATGAGTTGGACCATCGCATTTGCCGAAAAGCTGACACCGCGCAT  
GCTGGCCAGGCACTGATGGAAGCCTCCGCATCTGCGAGGGCTGATTACTCGCTGGATCAAG  
GAACTGGATCCAAACCTTCACAGGAAAGAAGCGTGGGCCAAAGGGGAGTGATGGCACCTTG  
ACTTTCCGCCACGTGGACGGGCGTACGTACATCAGTGGAAATATTGACGGTGTACCGGC  
AAGCTGTTCCAAAAAGCTCTGGAAAAAGTGAAACAGAAGGGCGAGGACCTCGCGCGGGCC  
CTGGTTCACCTTCTTGGCGGGGCGGACCAAAGTGAAAAATCGTCAGCGCGGTATACACGCCC  
CTGGTGGGTGGCGTGTCTGGATTCCGGGGGTGGGATTCTTGAGTCAAGAGGAGTCCCGG  
AAGCTGGGTAAGACTGCCTCGAAGGTCATTGACCTGGATACGATCGCCACTCGTGTGGAA  
AATGGCTACACCCCAAGTCCCGAGCTACGCCTTTATGTGATGGGGCGGGACGGCACCTGT  
AGGCATCCGGGCTGCACGGTGTCTGCCGACAACTGCCAGATCGATCACGTGATCCCGTTC

GGTGAGGGTGGGTTGACTGTGGCCTGGAAC TTGCAGTGCCTCTGCGCGCATCATCACAAT  
ATGAAGACTGATGGGCGCATCCAGGCGGCGATTGATTCCATGGGTGCGGTCGCCTGGATT  
GGGCCGTGCAATCGCACAGTGGTAACCGAACCTGTGCGACCGTTGGCGCAAGAGATGCCC  
ACGGGGCAGTGGGGGAGACTCTGGAAGCACGGATGGAGAAGACTTTTGAAAAGCTCCGC  
AGTTCACTCGAGGTATTGGATGAC

>RXA01463-downstream  
TAAACCCTTATGCACACCCCTAG

>RXA01469-upstream  
TCCATCGCCGATCTTGCCGATTGCTGGGACGATCCTTTTCGGTGACGGTGCATTTACGTA  
CCAGATGAGCAGCAGTTCACTGACTAGTATTCTGTAGGTC

>RXA01469  
ATGGCATTTCAGACATTGTGCGCAGCGTCGAAAACCGCACCAACGCAGCGACCCCTCAAC  
TGGTCCATCAAAAATGGCTGGAAGCCCGAAGTCACCGATTTCCTCGGGTACGGCTCCGGG  
CGTCGAGTGCGCGTCCTTGCGCGCGTGCATGTCCAACCCGAAAATTGCTTGTCGAC  
GCCCCCTCCCAATCAATTACCCAACAAGCACAGCGCGGTTGGCGCCAGTTCTTACCATC  
CAAGTGCCCAACCTGCCAGTAACGTGCACCGTTGGTGGGAAAACAGTTACCTCATCCACC  
AACGACAACGGCTACGTTGACCTCCTGGTGGAAAGACCACAACCTTGACCCCGGCTGGCAC  
ACCATCCAGATCCAAGCCGAAGGTTCCACCCCGCCGAAGCCCGCTCCTCATCGTGGAA  
AACACCGCCCGAATCGGACTCATCTCCGACATCGACGACACCATCATGGTCACCTGGCTT  
CCCCGAGCACTCCTCGCCGATGGAACTCGTGGGTTTTCACACCAACACCCGCAAACCA  
GTCCCCGGAATGAACCGCTTCTACGAAGAACTCCTCAAAGACCACCCCGACGCACCCGTG  
TTCTACCTCTCCACCGGCGCATGGAACACCTTTGAAACCTCCAAGAGTTTCATCAACAAA  
CACGCACTCCCCGACGGCCCCATGCTGCTCACCAGTGGGGACCAACCCCCACAGGACTA  
TTCCGCTCAGGTCAAGAGCACAAAGAAAGTCCAACCTGCGCAACCTGTTTATCGAATACCCC  
GACATGAAATGGATCCTCGTCGGCGACGATGGCCAACACGATCCCTCATCTACGGCGAA  
GCAGTCGAAGAACCCCCAACCGCATCGCAGGCGTTGCAATCCGTGAGCTCTCCCCCGGC  
GAACATGTGCTCTCCACGGAACAACTGCGTCACTGTCCACCATCACGACCAACGGGGGC  
CAAGGAGTCCCAGTAGTTACGCGCCGCGATGGATATGAGTTGCTGCAGCGCTACGAGACG  
AAGCCGTTTCGCC

>RXA01469-downstream  
TGAGTCCTACTGGGTGTCTCATG

>RXA01470-upstream  
AAGACGAACCTCGTCTTACTTCCTTTAGTAACTGCACATATCTACTTGTATATGTGTGCG  
GGAATTGAAGGCAGTTAAGTGTTGCCGAAGGAAACCGAAC

>RXA01470  
ATGACGAACAATGCATTAAACCGTGCCAACCCGGACCCGTCATCAGGCGGATTTGCTCAGG  
GCAGACTTCTGGGAAGACATGGGGTTGCCCAACTGAAAACCTACCATCGAAGAATCCATC  
GACGATGTAGCCCTCCCAATGCATACCGCTGTTCTAGAAATCAGCGGAATGCCAAAGGAA  
CTGCGTCAGACCGTGGAATCCGCAATGGTTGTGTGTATTCCGAGTCCTTCGGAGCTGTCC  
GGCTCCAACAGGGACCCGCTCACCGCACGATGGTTCACTGCATGGCGCCGTGACCCATTC  
GAACCTGGCCTCACTGAGTGTGAGAGGTGATCACCGGAACTCCACGCGAACTCGACAAA  
CTTCGAGGAGTGCTGGAATCTCTGGCTGATGAATACCGTTTGAAGTTGAGCTGCGAATC  
GTTGAC

>RXA01470-downstream  
TAGAAAGCCAGTGATTCTTTAGC

>RXA01471-upstream  
CCTCCAACCAGAGCTATAAAAAAGGTTGTAGAAGAAATTTCTTAACATACATCGTTGTGT  
TGCCAGGGGTTTAACAGATTAGTTGCTAAGGTCTGTCTCC

>RXA01471

ATGCAGAGTTTTAAAGACGCTTGAATCTTGGCCTGTCGACAATGTTTCGGCCAGTGTCATC  
 TCCGACGGCGCCGTGCACTTTTACGGCGACGTCGATCGTGTGTTTGAAGTCATGAGTGTG  
 AAAAACTCCTGGCCACCTACGGTTTCTTGTGGCATCGAAGAAGGTGTTTTGAGCTC  
 GATTACCGATGGGTCTTGAAGGATCCACAGTGAGGCATCTGCTCTCACATGCTTCCGGC  
 GTGGCATTCGATAAGCCGGTAGCGGAAAAGGGAGTGGGGGAGCGCCGATTTACTCCTCT  
 GCTGGCATGGACATCTTGGCGGATGCTGTTGCCGCTGAAGCTGAAATGCCGTTTGCAGAG  
 TATCTCCGCGAGGCTGTGTTTCGAGCCTTTGGGAATGGAGAATCTGAACTATGGGGTTCT  
 GCGGGCCACGAGGCGCGCAGCACAGTGGCTGATCTGACCAAGTTCGGCCAAGAGCTCACC  
 GCACCAACTCTGATCTCACCAGAAACCTTGCAGAGGCTTTCAGGTGCAATTCCCGGAA  
 CTGATTGGCACCCTCCCGGTTATGGCATGCAGAAGCCGTGTCCGTGGGGATTGGGCTTT  
 GAAATTAAGGACAGAAAGTCGCCGCACTGGACAGGTGACTTGATGCCGGAGAACACTGCT  
 GGACACTTTGGACAGTCGGGAACATTCTTTTGGACTGTTCCAGGCTCAGGTCAAGTCGGG  
 GTTGTGTTGACTGACCGAAATTTCCGTCCTTGGGCTAAACCGTTGTGGACTGCCTTCAAT  
 GACGAAGTCTGGGCCGAGTTAAATTCA

>RXA01471-downstream  
 TAAACTTTTGCCGTAATTACGGT

>RXA01472-upstream  
 GCACGTCCACGCGCCGGACTTGCGCGCCTATTTACAAGCACGCTTATCGACGTAATTACA  
 CTCGGTGGAAACCGTCGCGGAAAAATGGAGGATCCTCGCC

>RXA01472  
 ATGAACCAAGCAAACCTGCCTGCCGAAATCGCGGACCTCTCCGATGAAACCGCACTGTGG  
 GAAATCATCAACGAATACAACCTGGGACGACGGCTTCGCGGTTCCCTTGCAGTAGTCCGA  
 CACCCCAATGCGACCGAGCGCTAGCCCTTCGCTGTTTGGGACATCGATGAAACCGCC  
 CAAATCCACCCTCCGACGAAGAATCAGCGATCGCCGAGTTGTACGCCAGCACCCGAGAA  
 AACGACCCAGCAGAATTTCGACAGAATCATGGACTACTGCACCACACTGGTCAAGGGCTC  
 CGCAAGCAGACCTATCCTCGGGGCGCCAACCGTTTCGACACGGGATTTTCAACCTCGAG  
 GACCTTCTTTGACCGACCGTCAGCGCAAAATCCGCGCCGGGAAAACCAAATTTGCGCTC  
 AAGAATTTTCGAGGAAGCTTTCCTCCAACCAGAGCTA

>RXA01472-downstream  
 TAAAAAAGGTTGTAGAAGAAATT

>RXA01473-upstream  
 CGTAAGCAATTCCCACCAATGCAGTTTCCTCGGTGCGTTATAGTGTGAGTAGGGCCAAA  
 AACCAACAATATCCTGGTAGCCAAGAATAAGATCGTGCTT

>RXA01473  
 ATGACTGACATCGGTGATGTCGATCAAATAGTCTGGGAATTCATCCATTTCCACGATGAC  
 TCGATAAATCCATTCTTTGAGTTTCATCAAGAGTGATTGCATCAACGATGAGGCAATCGAA  
 CGCAAAACCCAGATCCTCGGAATCATCTTGGGTAACGAGCCATGCGGGAGTGTTATTAC  
 GCCCGCCAGAATACAATAAAGCCCATGAGCCATACGGTCTCTTTTGGCGACGGCTGGATC  
 CAAGTCCCTTGAGGATGCTGCAGAAACCGTGTGATCACCGACACGTTGGATGCCCTCCGA  
 TTTTCTCCCGAGCAAGCGGAATGGGCTGCAGAAATTCGGACCACTACTGTGCGGCCAGCG  
 AACCAACCGCCGGCGTATCTCACGGCTTTAGACGGGCACACAAAGCTACCGCTTAGCCCG  
 CAGCTGACGGAGTTCTATAGCTACGCCCCGATCCTGGACAAACAGTGAGGCCTTGGGAAAC  
 GTCATTGATCCCGATGACTACCTCGATCATCTCACCGACCTTCGCTTTCATTTGCAGGAT  
 CTTCTGGATAATGAGTTTGAACGGGTGGGGGTGCTCGTCGATAAGCAAAATCGCCCGCTC  
 GACCTTGCCCGGTGCGCGCTGTTCTCGCTCGACGCACTTGCACGCGCGCCCTACAACCGC  
 GCTACTTCGTTCTCGCCGCGCCCGAGCCTGAGATCTGGGCGTTTGAGAACGAGCAGCTC  
 CACGCGCCGGACTTGCGCGCCTATTTACAAGCACGCTTATCGACG

>RXA01473-downstream  
 TAATTACACTCGGTGGAAACCGT

>RXA01474-upstream

CATCACCGATGTCAGTCATAAGCACGATCTTATTCTTGGCTACCAGGATATTGTTGGTTT  
TTGGCCCTACTCGACACTATAACGCACCGAGGAACTGCA

>RXA01474

TTGGTGGGAATTGCTTACGCCCCGTTTCCCTGATACCCGCGACGATTCCATCAGCCGCGGC  
AAAGCACGATCAGCGTTGGAGAAATCCACGGGCCCTTAAAGAGCGTTTCGCGCGTCATTTT  
CCTGCAATTTCCATACCTGTGATACGGGTGATGCTGCAGATATTCTCGTATCGGGTTGG  
TGGCTTTTCAAGTTCTAAAAAGAAGATCCTGATGCAGCGGAAATCCAGACCTTATTTATC  
AACCATTGGCCACAGGTCCATTGAGCACTCAATTGGAAACTGCTACCGGGTTGAAACTG  
CAGGTGGTGACCAATCGAGAGCGTATGAAGATCACTCTCATTTGAACCCAAAGGCACATCA  
GGACATGCCATCGACCCCCAAGCTGGCAAGGGTTCAAGGGGTGGCTTCTCTCGGACAAT  
GGCCAAGAAGATGAATACGACGATGTGACACCGTCACAATCCCCGATGCACTCAATGTC  
ATCGGTTACATTCTTACCCATGGAAGTCCACCTCAAGAAGGCTGGAAGGTAGACGTGTTG  
GAGCGT

>RXA01474-downstream  
TAGTCCTCGATGAATTCTTCTCC

>RXA01475-upstream

TGGATCTCAATGTAGTCGCAATACGGCTTTTATTTCGTCAGGCAGTTCTGCGAATAGTATT  
CGTGACATTGGATTACACCCGTTAGTAGTTTTTGGGGGA

>RXA01475

ATGAGCATCCAAGGGTTTTCCGCGAGGTGACTATTCTGCATGTTTTGAACCGCGCATCGAT  
GCGTGGGTTGATATTTCGCGGTCCGCGGAAGCCCGAGTGGTTGGCGGAAAATATCGATAAT  
CCGCTGAGACACTGGGGCGATAATCCTCATATCCCGGTGTCTGCTGCGAAAAAGGCTGGA  
AATATTTACAAAGAGACCCTTCGAACCATGAGAGCCTCAACAAAGACCCAGACCAGGAT  
CCCTTAAAAGAAACCCTGCGCAGCTTCATCGCAAGCATCAACCAGCTCGCCGCAAAGAAG  
AATTTCAATTGATGCCGGGGTGCAGCAAGATATCGTTGTTGCGCTGGAAAACTATGCGAA  
GCAGCAGAAGCTAGCCAGAAGAAATTCAGCAGGCGATCGTGATGGGAGAAGAATTCATC  
GAGGAC

>RXA01475-downstream  
TAACGCTCCAACACGTCTACCTT

>RXA01476-upstream

ATCCAAGAAATTTTCGCACCTCAGGAGTAGCGATACTTCGTAAATTTGGGAAGAAGGAGTA  
GCCACATGACGTTGATCGACCTCACTGCTGGAGTGAGCGC

>RXA01476

ATGAGCGATTACCGTGCACCGTCGTCATCCTGAACCGCACAGCTACTGCGACTTCCATC  
CTGAGAGATATTAAAGCCCTCACCGGTTACGGCCTGTCTGAGATCAGGTCGCGCATCGTT  
GCGGGACTTCCCGTCGTGATCGAGGAGATGTTCTCAAACGCCTGGTACGACGAACGCGCA  
CAACTGTTGCTGGCACTGCTGACCAAATGGCAGAACGAAGGAATCACATTTCGAGATTCGG  
GAAGTCGCTGAGGATGATCCCATCGAAGCAGGGGCATTGATCTCTCTAGAAGTGCTGCGA  
AACATCATTTGAGCCAGACGATAATGAATCGAGGGACGGTATC

>RXA01476-downstream  
TAGTGGTGAACGTAAACCCCGG

>RXA01479-upstream

GCCATAAATTTTCGAAGAAGCGCGAAACAGGTAGAGTCTAAGGTGTCATTCTTGGTACAAG  
TTTTATATTTAGGGAGAGTTATCCACACATGATCCAGTTA

>RXA01479

GTGATAGGCGCTGCAGCAGGCTACGTGCTTGGCACAAAGGCCGCGCAAGCGTTACCAC  
CAGATCAAAAAGGGATATGAGGCAGCGATTAACCTCCCCTGCCACCAAATCTGCAGTAAAC  
GCCGCCGCAAAGCCATTGCCAACAAGCTGGATCCGCAGCCCCGCATGAAGGAAGTAAAA

AACCTGCGGACTGCGGACGGGCATGAAGTCCTCGAGCAAGACCAGGAC

>RXA01479-downstream  
TAAATTACCCTCTAAACGCCCCG

>RXA01484-upstream  
GAGTTTACTCTTAACCGCAGTAGTGCAGCCAGCCCTGAGGGTGGTGGCGTATTCGATGCT  
CAGAACGCCTAATAATCGGCACAAAATTGATTCAATTTTG

>RXA01484  
GTGTTGGGCACAGCTCAATATGATGGAGTTCCATCGAGGCAGTTTGCTGCTCGTTTGAGG  
CATGCCGCGAAGCTGTGGCGTCTTCATGAAATCCAGCATGTATATACTGTGGCGGAAAA  
CTTCCTGGCGATCGTTTCACCGAAGCAGAAGTCGCGCGGGAGTATTTGATCAAAGAGGGC  
GTGGATCCGGATCTGATTTTTGTCTCTGCAGTTGGCAATGACACTGTCTCCTCCTATGAG  
GCGCTTGATCCGGAAGCTTGGTCGGGTGCTGATTGTTACTGATCCGAACCATTCGTAT  
CGGGCGGTGCGCATCGCGCAGCATGGGCTTTGACGCGAAACCTTCCCCGACAACCTAT  
AGTCCCGCGAAGTTTCCGTCGATAGTTTATTTCTGACCTTGTCCTATGAGTGGGGCGGG  
GTAGTAGTACAGGACGTGTGCGGGCTCTTGGGTGAACGGGTGCCCCGATAAGGTGAAGCAT  
CTTTGCGCGCAATCCAAGGTCTGCTGCGCCCTTCGCGGCGTGCACGCCATGAGCAACTTC  
GGAGGC

>RXA01484-downstream  
TGAAAAAGTAGATGTACCCCTAT

>RXA01485-upstream  
CTCAGGGCTGGCTGCACTACTGCGGTTAAGAGTAAACTCTTGGCTAAAAATCTTCTCACG  
TTAACTAGTGTGCCAGCTGGACTCGTCTAAGGTGGGGACC

>RXA01485  
ATGAACCTTATAGTTTGGTGCATCTTCGGGAAAAACGTCCGCCGTGTATCGGTCACTGTGGCA  
ATTGGAGCTGGCGCGCTCCTTATCAGTGGACCATTTTTACTGCTCACACTGCAGAAGCC  
ACAGAAACATATGTCTTGGCTGAATCACCAGAATTTTACCAAGACAATGTCACTGACTAC  
ACCGGCCAGATTTCTCTCGTCCGATATCACCAACATTCAGGCTGCCATCGATGATGTAAAG  
GCATCTGAACAAAAGGTTATTTTCTGTTGTTTCTTAAGCTCTTTCGACGGAGTTGACCCT  
GAAACGTGGACGCAGCAAGCACTCCAAGCCAACGGCGGCGGAAACGTCTTGATTTATGCA  
CTCGCTCCCCGAGGAACGGCAGTACGGCATCCAAGGTGGTACTCAATGGACCGACGCTGAA  
CTCGACGCCGCCAACACGCTGCTTTCCAGGCACTTTCCCAAGAAGATTGGGCAGGCTCT  
GCACTAGCGCTGGCAGAATCAGTTGGTTCTAGTTCTTCCAGCTCTTTCGGGCTCGTCCAGC  
TCTTCCGATTTTTCGGCGCTTGGTTGGCTGCTGCGGGCGTTGGCACAGTGGCCGCTGGT  
GGCGGAATTTGGGCTTATTTCCCGCAGCCGCAAGAAGAAAACAAGTGCTGCAACCTTGGA  
GATGCACGCGAAATCGACCCGCGGATACCAACCGCTCATGCAGCTTCCCATGGAAACT  
CTCGAACACCTTGCCCAAGAAGAGCTCACCTCCACTGATGACTCCATCCGTCGCGGAAAA  
GAAGAGCTCGCTATCGCTACCTCCGAGTTCGGACCAGAGCGCACCCGAGCTTCAACCGC  
GCCATGAACCACTCCACCGGCACCCTGCAAAAAGCCTTTGAGATTGAGCAGCGCTCAAC  
GATTCTATCCCAGAATCCGAAGCCGAACGTCAATCCATGCTGGTAGAAATCATTTTCATCC  
TGTGGCCAAGCCGACGATGCCCTCGACGCCGAAGCCCAAACTTTGCCGATATGCGCAAC  
CTGCTGATCAACGCGGGCAGCAAATTGGATGCTCTCACCAAAAATCCGTCGACCTGCGC  
ACCCGCCCTCCCAAGGCCCAAGAAACACTCGCTGGCCTGCGCACTCGCTACTCAGCAGAG  
GTCTTTGAAAAGCATCGACGACAACGTGACCTCGCCAGCGCTTCGCTCGACGAAGCAGAA  
GAAGTCTTGCCACAGGCGTACGAGATAGAGTCCATGCCCGCAGGCGAGCAGGGCGGGCTT  
ATCGACGCGATCCGTACATCGAGCACGCCATCACTACCGCAGACAACTCCTCGCGGGC  
GTCGAGCATGCCGATGAAAACATCTCCACAGCCAAAGCAAACGTTGCCGATCTGATCCAA  
GAAATCTCAGACGAAATCAACGAAGCCGGCCAACTCAAACAAAGCGCAGGAGCCGACGGT  
GCCCCGTGCCGACTGGGCTTCCCTCGACGATGCTGTCCGCGCAGCCAGCGCAGCACTAATC  
ACCGCATCAGCAGACGCCGAAAAGGATCCGCTCGGAACCTACACAGAATTGTGATGTC  
GACTCCGCCCTCGACACTCAACTTGACACACTTCGCGCCACCGCAGCTGATCAAGCCCGC  
CAGCTACGCGTATTCGACCAACAGCTGCAATCTGCAAGAAGCCAAATCCAAAAGGCCGAA



GACCTCATCTCCACCCGCGGTGCGATCGTAAAAATCCGAAGCCCGCACCCACCTGGCCAAAC  
GCACAAAAGCTGTACGCCATGGCACAACAAACCGCACCCGCGACACCCGTGCAGGAATT  
GATTACGGACGTCAAGCAGCAGTCGCAGCCCAACGCGCCAGCAAGTCAGCACAAAACGAC  
ATCACCACCTACAACAATCGCCACAATTCCGGTGGCGGAACCACCGGTGCGATTGTCACC  
GGCATGGTGATCAACTCGATTCTCAACAGCGGCCGCGGTGGCGGTTTCTGTGGAGGCGGA  
GGCTTTGGTGGAGGCGGTGGCGGCTTCAGCGGTGGTGGCGGTGGCGGAGGAGGGTTCCGC  
GGAGGCCGCTTC

>RXA01485-downstream  
TAGCCTGAAACGAGCAAAACCAA

>RXA01488-upstream  
CCTTGATATCGCCACCGGCATCGATGATGCCCTCGCACTTGCCCTACGCACCTGGGCTCACC  
TGAAGTAGAGCTCATTTGGTGTCAACACCACCTACGGTAAC

>RXA01488  
GTGCTACTCGAAACCGGTGCGAGTCAATGACCTGGCACTGCTTGATCTGTTCCGGTGCACCA  
GAAGTACCTGTGTACTTTGGGTGAGCCACACGCACAGCAAGGATGGCTTTGAAGTTCTT  
GAGATCTCCGCGTTTCAATTCACGGACAAAACGGCATCGGCCGAAGTCGAGCTGCCAGCAAGC  
GAGTCAAAGGCACCTCCCGGCGCAGTGGATTTCTTCATTGATTCCGTCAACACCCACGGC  
GATGACCTGGTGATCATCGCAACTGGTCCCATGACCAACCTGTCTGCGGCAATCGCAAAG  
GATCCAAGCTTTGCTTCCAAGGCTCACGTGGTCATCATGGGTGGCGCCTTGACTGTCCCA  
GGCAACGTCAGCACATGGGCAGAAGCAAACATCAACCAGGACCCAGATGCAGCAAACGAT  
CTGTTCCGTTCCGGTGCAGATGTCACCATGATCGGTCTTGATGTCACCCTGCAGACCCTT  
CTTACCAAGAAGCACACTGCGCAGTGGCGCGAACTGGGCACTCCAGCTGCTATCGCACTG  
GCCGACATGACTGATTACTACATCAAGGCATATGAGACCACCGCACCACACCTGGGCGGT  
TGCGGCCTGCACGACCCACTGGCAGTAGGCGTTGCAGTGGACCCAAGCCTGGTCACTTTG  
CTCCCCATCAACCTCAAGGTAGACATTGAGGGCGAGACCCGTGGACGCACCATTTGGCGAT  
GAAGTCCGCCCTCAACGATCCAGTGCACCTCCCGCGCAGCTGTCGCCGTAGACGTGGAT  
CGTTTCCTTTCTGAATTCATGACCCGCATCGGCCGAGTCGCAGCACAGCAG

>RXA01488-downstream  
TAAAAGCAGCTCTGGTGAAGGTT

>RXA01492-upstream  
TGAAGTGGGCGCGTTAGCTTCGGCGCGTGGCAAACACATTTGCTGGACTGCAGGCATAA  
TGGACAAAGACTTTTAGCAACAACATATGTGGAGGTGACAG

>RXA01492  
GTGACCACAACCTCTGTGGGCGGTTTCTGACCTCCATGCAGCGGTGAAAGCTAACGCTGAT  
CCAATTGAGAATATTCAGCCTAAGGATCCGTCTGACTGGTTGATTGTTGCAGGTGACGTG  
GCGGAACGTACCGAATTGGTGCTGGAAATTTTGGCACGTTTGCGCAGGCGCTTTGCCAAG  
GTGATCTGGGTTCCGGGTAACCATGAGTTGTTTCTCGCTCCGCGGACCGCTATCAGGGG  
CGCGATAAGTACTCTGAACCTCGTTGAAGGCTGCCGCAAGATTGATGTGTTGACTCCGGAG  
GACCCTTACTTAACCTTTGGTGGGGTTACTATCGTTCCGTTGTTTACACTCTATGACTAC  
TCGTTCCGTCGACCTGGTTTACCCTGGAGCAGGCTGTGCAAGCGGCGCGGGATCGTCAA  
GTGATGATGACTGATGAGTTTCTATTGCGCCTTTTGTGATATCCGAGCGTGGTGTGCG  
GATCGCTTAGCCTATTCCATTAAGCGTTTGAAGCAAGATCAACGGGCCAACAATTTTGATT  
AACCCTGGCCGCTGGTGGTGGAAACCGACTTATCAGATGCGCTGGCAGGAACCTTGCAATTG  
TGGTGGCGGTACTCGCCACACCGAGGGGATGGGCCGAACGCTACAACGCGGAAGCCGTTATT  
TACGGTCATCTGCATATGCCCGGAATAACCAACGTCAACGGTGTGAAACACATTGAAGTG  
TCGTTGGGTTATCCGCGCGAATGGGAGCATTGGTCTGGGCAGCATGTGTGGCCATATCCA  
GTGATGGAGGTGGACAATGCTGGA

>RXA01492-downstream  
TGAGTCTTTGTTTCCAAATTCGG

>RXA01494-upstream  
CGCATGAGGAGCTGGCTAAATTGCGCGAAGGTGCAGCGCCTGCAGGTGATGCAGATCCTT

ACAAGACTTCATCCAAGTCTGAATCTGAGGAATAACACCA

>RXA01494

GTGACGGATAATAGTCAGTTTCATGCTGCTTCAGCATTAGTCCAGGCAGCTCACACGGTT  
AGCGTTGTGGGGCATCTGCGACCCGATGCTGATGCAATCGGCAGTGTAGCTGCCACAGTG  
GCGGCACTACAGCAACTTGGTAAAGACGCCGTAGGTGCAATCGGCCAGCTAGATTTCGATG  
CCCCGAACTTGTACACCATTCCTGGGGCATCAAACATTAAGTTTGGCGATTCACTGCCG  
GAATCTGACCTCATCATTGTTGTTGATTGTGGGTCAATCGAACGCACCGGTGCGTTTGAA  
AGCATCATCGTCAACAATCCTGACAAAGTATTGGTGGTTGATCACCACGCCACCAATCCT  
GGGTTTGGTGCCGTCACCTTAATCGATGTGGAGGCAGAATCCACCACCACGATTTTATAT  
GACTGGTTTGTATGCGATGTGCGTGCAAATTAATCCCGATATCGCCCCACGGCCTTTATGCT  
GGACTGCTCACCAGTACCGGGTGCTTCAGGTGGGGTCGACCAGTCATGCATGACATGGCT  
AAAGAACTCATGGAGTTCGGTCTAGACATTCGTGCCATTTTCATCAGCATTGCTTGATCAA  
ACCTCCGTGGATGATTTGCGTCTTGTGGCCAGATTGTCTCTCGGATCGAGCTGCGGGAA  
GCAGGGCCATATACTCTTGCTGTCTCTGTGGCAGACTTCGATACCATCAACGGCCGTTCA  
CGCGCCGTTGTGGAAGGCTTGATCGAAATGGTTTCGCGCTGTGGAAGGCGCAGACTTCGGA  
GCAGTATTCAAAGAATATGAACGTGGCGTCTATACCGTGTCACTGCGTTCCCTCCAATTG  
AGTGTGCTTCCTTGGCAGTGCATCTTGGCGGTGGCGGACACATTCTGCTGCAGGCTAT  
ACCGCTCGTGGTACGGAATCGAAGCCCTCGATACGTTGATTGAAGCAACCGTTACCTTG  
GGGGAGTCTTTGCGAAGCTCGGCGCATGTTCGATGTC

>RXA01494-downstream

TAACAACGACTTTGAGCATGAGT

>RXA01497-upstream

CGCCCCACGGGCAAAGTTTCAAAAACCTCTGATCCATATGGATCAGAGTTTTTTTCGTATCT  
GCCACCAGAAAGACGCCCCCTTTGGCACGCCGAATTAGTCA

>RXA01497

ATGGTGGGTAAACTTCCCATCATGGCTGAAACCAACGAAAATGATCTTCCAGTTATCGAC  
CTTGCCCCAAATCGAAGGCTATGTTGTAGATGACTCGGATGAAGATGATCCAGTACTTCTG  
CGTCCAGATGGAACCCCCATTGAAACCTGGCGCGAAGACTTCCCTTATGAAGAGCGCGTC  
ACCCGCGAAGACTATGAGAAGGTCAAGCGCTCCCTCCAGATCGAGCTGCTGAAGTGGCAG  
AAGTGGACCAAGGAACTGGCCAGCGCCACATCATTTTGTTCGAAGGGCGTGACGCGCT  
GGTAAGGGTGGCACCATTAAAGCGCTTCAACGAACACCTGAACCCCTCGTGGTGCCCGTACT  
GTTGCGTTGGAGAAGCCATCACCACGCGAATCCACCTCATGGTACTTCCAGCGCTATATT  
CAGCACTTCCAGCTGCTGGCGAGATCGTTTTCTTTGACCGCTCTTGGTACAACCGTTCC  
GGCGTGGAGCGCGTCATGGGTTTCTGCACCGAATCACAGCATGCAGAGTTCTGCGTGAG  
GTTCCAATGCTGGAAAACATGATCCTGGGCTCTGGTATCAGCTTGACCAAGTTCTGGTTC  
TCGGTGACCCGTAAAGAGCAGCGCACCCGTTTTGCTATCCGCCAGGTTGATCCTGTGCGT  
CAGTGGAAGCTTTCCCCAATGGACTTGGCTTCACTTGATCGCTGGGATGATTACACCCGC  
GCTAAGGAAGAGCAGTTCCGTTACACCGACACTGATGAGTCCCCGTGGATCACCATCAAG  
TCGAATGACAAGAAGCGTGCGCGTATCAACGCGATGCGTTATGTATTGTCCAAGTTTGAT  
TACACCGACAAGGATTACGAGCTCGTTGGTGAGCCTGACCCTAAGGTTGTGCTTCGTGGG  
CGCGACCAGATCGGTGAC

>RXA01497-downstream

TAGTCACTAGGCGGGCATGAAAA

>RXA01501-upstream

CTAACGAAATCGCCGGACTCCTCGCAATCACAAGAAGCGACGACTAGCCTGTGGGGACAA  
ACTATTTCAAGAAATTTATTCAACAAAGGAGTTCTTCACAA

>RXA01501

ATGAAGGAAGTAGCAGTCAACGAAGTCCCAGCAGGCGCACAGTTGATCGATGTCCGCGAG  
ACCGATGAATACGCAGAGGTTTCGAGCACAGGGTGCCGTCAACATTCCTATGAGCGAGTTC  
GTTGGCCGCATCGATGAGATCGATCTGGACCGCGACATTTATGTCAATTTGCAAGCTGGGT  
GGACGCTCAGCTCAGGTTGCCGAATACCTTGAGCAGCGCGGAATTGAAGCCATCAACGTA  
AACGGTGGCACCGACGGCTGGGTTGCTGCAGGATTGCCAACCGAGGCA

>RXA01501-downstream  
TAAGAACCCGCGCAAAAGATCC

>RXA01504-upstream  
GCATGTAGCGAGTTTGATGAAGTTGTCGCGATAAGAGGAGGGGCGTGTCCGTCTGTAGGA  
TTGGCTCGTACCGAACTTAGAAAACATCATGGGAGTTTCGC

>RXA01504  
ATGAATATCACGTGGCTTATCCTGGCCGGTGTTTTAGCCATCATCGCTGTCGTGTTCTTT  
TATCTTTTCAGCACAGAAGAAAAAGAGCGAACCAGCCTCCTCGTCAGCGTCAAGATCCT  
CTGAAATTTGCCGACGGATCCGACACTTTTAATGCCCGCATTTTGGGTCTCGGAGCAATT  
ATTTCCCGCGGTGGCGTGGATTATGTCTGCCGCGGAGCCATCCAGTTCCGTCAAGGCCAA  
TACATTTGGCACGAGTATCTACTCGACGGTGGCAAAGGCAGTGAGTACCTGAGCGTGGA  
TACGATGAGGGCCAACTCAACCTCGGATGGTGGATTACCCGCCCTGACCTGGCACAACAG  
CCCGCACATGATGTCACCGTGGAGGGCGTTTCGCTACCGTAAAACCGAATCTGGCGTGGGC  
ACCTTCACCTCCGAAGGCACCACCGGCGTGGCTGATCAAGGTGAATTTGAATACTGGGAT  
CTCGCCGAAGTTGGCGGAAACAGGTGCTCAGTTTGAACGCTACGGCAAAGACAGTCCA  
TTTGAAGTATCGCTCGGTGGACGGTGTGCCCGGCGAACTCACCGTTTACCCAGCACCA  
GAGGCCTCA

>RXA01504-downstream  
TGATTTCATCACATCGATTGCATG

>RXA01505-upstream  
TCAGTTTTGAACGCTACGGCAAAGACAGTCCATTTGAAGTATCGCTCGGGTGGACGGTGC  
TGCCCGGCGAACTACCGTTTACCCAGCACCAGAGGCCTC

>RXA01505  
ATGATTTCATCACATCGATTGCATGCCTACAGATGTCTCCGCCGAAGCGCTCGGCGTGAGC  
TGGAATGGGGAATCGCCGGAGGTGCTCGTCGATAAGCTTATCGACGCATCCCCACACCCC  
AGCACTGCCATTTAGCGGTGATTGGCGGCTCGCATGTGGTTACCGTTGAAACGCCCGAT  
GGGCGTTTCCGGGAAGAAATTTCTGCCATGCACAAGAAGCGGAAGATTCCCGCTGGCCG  
CTGCCCCGACAGCATCACGCGGGAACCTACCTGCTGCAAACCAACGTCGCCGTGCTGTCT  
GAGGAAGATTTTGGCCGCGCAGCCGAAGAAATCTCCAACGGCGACGACGACTGGTTGATC  
GCCAGTTTCCCGGCGCGGCGGAACACCACCTACCGCGCTGACCGCAGAATTTCTGGAA  
GACGTATGGGAATGGTTTAGCCACCACCTCTACCCAGAAGAGCTCACCATCGTGAGCAGC  
AGGAGCATTTACAAACCA

>RXA01505-downstream  
TGAGCTCCCGAACTACCGAAGC

>RXA01506-upstream  
CGCTGACCGCAGAATTTCTGGAAGACGTATGGGAATGGTTTAGCCACCACCTCTACCCAG  
AAGAGCTCACCATCGTGAGCACGAGGAGCATTTACAAACC

>RXA01506  
ATGAGCTCCCGAACTACCGAAGCATAGGATTATCCTGCTGTTTTTAGCAGTGTTGTGC  
CTGTTTCGCTGCGGTTTTTGCCAAGCCTGCGGTGGGAAGCCAAGTCTCCGACCGCTGGCCC  
GGAAACAACGGCACCTACTCATGCGCTGGCGAAAGTGGGGTGGTGGATGAAATCGTGAAC  
ATGTCCACCCCAACCGACCGCGCCACCGACCCCGCAACTGGCGATACTTACCTGCGATAC  
AGCAAAAACCTGATCATCATCTCAGGTGAAGGCACGCCGAATGCACCATCACCGTCGAA  
GGCTTGACCGCGTCAACAGTGGTGCCTTCATCTGGCTCGGCGGCGGTTTCGGCCCATCC  
TCACCAAGCAGTTCCAGCGGCGGATCCTCCGGTTCCGGCGGTGGCGTGAAA

>RXA01506-downstream  
TAGAAAGAACACTATGAGTCAAT

>RXA01507-upstream  
GCGTTTCATCTGGCTCGGCGGCGGTTTCGGCCCCATCCTCACCAAGCAGTTCCAGCGGCGGA  
TCTCCGGTTCCGGCGGTGGCGTGAAATAGAAAGAACACT

>RXA01507  
ATGAGTCAATATCTTGTGCGACGGAGTGCTCGGCACCCTTTCATATTTCTGTGTTGGCCGCA  
GTGATCCTCGTGGTTCGGTTTTGTGATTTTGGACTTGATCACCCAGGTAACTGCATGAA  
CTCGTGTGTTGTGACCATCTGCCCCAACGCCGCTGTGATCACCGTGGCGCAGCAGGTTTCC  
ATCGGAATCATCGTGGTCACTGCTGTGCTGACCTCCTCAGATATTTTGAGTGAAGGTTTG  
CTGGAGACTGCAGTGTTCCGGTGGCCTTGGTCTGGTTATCCAAGTGGTGGTTCATGGCGGTG  
TTGGAAGCTGTCATTCCGGGACGTTTCCGTGATCTCGTGGAAGATCCCAAACCTCCGTTCC  
GGTCCCGTCGTGGCCCGCGTCATCTTGATCGTGGTGGGAACCGTAAACGCTGCATGTCTG  
ATT

>RXA01507-downstream  
TAGGACCCATCTGGCGCTGGCTG

>RXA01518-upstream  
AGCAGAACCTGATGCCGTCTGCACGGCACGACCATTCAGAACATGTGGATAATCTTGA  
TCCCACAGACATTGAAGGTGTCACCAAGATTTAAGGAGTC

>RXA01518  
GTGGCTTTCATGCAGAAAACGTCAGCGGGTTGGTTGATCGCAACGGGAGGTTTCCTCGCC  
GCTGTGTCCGCCATTTTGACGTGGCGTTTTTATGGATCCATGACCTCTATTTCCATCACC  
GTATCCATCACTTTTTGGTTGTTGGCCGTGGTGTGTGGTTTCGCAGGTGTGAAGGTCCAA  
GGTCGCCTCGATGAGGGGCTGATCGGCCAGGACAAAATCCCAAATGAACCCCGTGACCATT  
GCCTATCTGGCCATGCTGGGTGAGCGTGTGCGTGGGGTGGCGCAATTTTCGGCGGCGTT  
TATGTGGGAATTGGCAGTTATGTAATCCACGCCGCGGTGAGTTGTCCGCAGCATCGAAT  
GATCTTCCCGGAGTTATTGCCTGTGCGCTGGGCGGAATCGCACTCTCAGCTGCCGGACTT  
TATTTAGAGCGAAGCTGTGAGGCTCCGCCTCCCCAATCTGGCGAAGCGATCAGC

>RXA01518-downstream  
TAGATTGGAATTCATGAATCAAG

>RXA01519-upstream  
CTGGGCGGAATCGCACTCTCAGCTGCCGGACTTTATTTAGAGCGAAGCTGTGAGGCTCCG  
CCTCCCCAATCTGGCGAAGCGATCAGCTAGATTGGAATTC

>RXA01519  
ATGAATCAAGACCTGTACACGAGGATTCCGGCGACGGCAATTCTGTGACCGTGGACAG  
ATTCTGCTAGCAGTACTCATTGGACTTGCCCTGATTGCCAGCGTCATCATGCTGCTGGCC  
AACAGTGACGGCGCCATGAAAATAGCACTTCTTGCAGCGCTGTGGGCGGCAATCATCGGA  
TTCTTCCTTGTTTATCGGTCCCGCAAACAAGTCGAAGCTGCTGCGCGGGAGAAGGAAACC  
CTCGAATACGCACACCAATCTGAACTCAACCGACTAGAAGCTGAACTCGTCCAAGAAAAA  
ATGGAGATTTCTGAATCCCGTCGTGCACGCGATCAGGAAACCCTTGAGGAAATCAAACCT  
CAACTGGAGGAAATGCGCACCCAGCTGTCTGAGCTTTCTGGCCGTGAATGGGGCTATGAG  
CCAACCATGCTGCGTGCCGAAGCCCGACGAATCCTTGAGTTGGAATCCCAGCAGCTTTCC  
CAGCAGTTCCAGGCACCGCAGCCAGAAGTCCCGGAGCCTGTTGCAGTTCCAGAGCCAATG  
CCGGAACCTGCACCGGTGCCGGAACCAAGTACCAGAACCTGAGCCAGTTGAAGTTGCTGTC  
GAAGCTGAGGAAGAACCAGCACCAGGTCGAGAAAGGCGTAGGCACGCAGCTCCCGAAGAA  
ACTGGCGGACGCCGACGAAAGATGAACGCCAAGGCGGTTTGAGCGTGGCTGATCTTCTG  
GCAGCAGCAAGGAAAAAGGAAAAACAAC

>RXA01519-downstream  
TAATGCAGGCTCCTCGCCTTCGC

>RXA01520-upstream

CTGCATACCTCGCTCACGCACGGCATCACTGTGATGGATCCGCTGCAGACGTCCGGCAGG  
CATCGTGATGTCTGCGCACCCGATTGGTCAGGACCGGTGG

>RXA01520

GTGGCGTCCGCGTTGGATGAGTTGGGGGAGACCATCGTGGGGCTTTTGGTGGGGGAGCTC  
GGTGGCTCGATTGTGCGAGATCGCCGATGACAAGCGCGCACAGTTGGCTGCAGCGCTGACC  
TATGCCGGATTTTAAAGCACCTTGACGCGCGATGCGTCGTATTTCCCTGGATGAATTTCTT  
GGCGATCCCGATGTGACCTCTGACATCGTTATGGATTCCGCACAGCAATTCCAGGCACTG  
CCTTCGTTGGATGAGGTCATTGCCCAGTACGATTTCGATTAACAACCCCGGCAGGCAACGC  
CTTTTCCGGGATTTGGCGCGCAGGCAGGCAGAGATTTCCCGCGCGCAAGATATTGAGCTG  
TGGGCAATTCAGAAGGAGGACCGT

>RXA01520-downstream

TGAGTTTCACGCATGGTCAGGGC

>RXA01523-upstream

AATCCTCCAAACCTGTGGATAGAACAATCTATCCACAGGTTTTCAGTTTTCTGCAAAGTT  
CATCCTTGGCTTCTTATGCCTTCGGATCCATAGTGGGGTC

>RXA01523

ATGAAAAACTGGCAAGAAGAATTCCAACCTAGTCAATCTCACGAAACTTCTGCATAGCGAT  
ACCGAGACTTCTGCGGCAATCAGTAATGGTCAAATGATTAACTCACTCATGAAGTCGCA  
ATCAATGCTGAAAAGTACCGAAGCCTTCCCTGCATGGGATAAAGCAGCCGCCCCGAGCTTTT  
GCAGTGGGTATGACTGTGGACAAAGCAGTGGTAGCGGGCAGTCTGCGGCGAGGTTATGG  
GGATACCAAACTTTGACTGTTGAGAAAACCGTGTTGTGTCTGTTGCCGGAAGGCTACGT  
TCAAAATCCTCCAAGCATTTGGCCGTCCGGGATGCGATATAAAGATCGTTACCTCTCGTCG  
CGTGATATTCGAGAGGTTTCATGGGATCCGAGTTACGGGAGCGTTCCGCACATTTTGGAC  
ATCGCTTTGGATGATGGGGTGGTGGCGGCTGTGGTCACTATTGATTTCAGCTCGAAGACAG  
AATCCATCGCTTACGCGTGAGAAGTTAATGCACAGTGCGGAAAGTTTCCCGAGGCATCGG  
GGTGTGAAGGCGTATCGGCAGGCGATTGAGTTGTGCGATTCCCAATTCGGATAGTGCTCAG  
GAGACGAGGGCTCGGTTAATCCTTCGGGAGGCCAAGCTCCCGGAAATCCAGTCAGTGAAG  
GTGCAGGCCCGTTTCGATCAATCGCACACAAGTATTTCCCTCGTCGATTTCTTGATCAAT  
GAGTGGATCATCGTGGAGATTGATGGACGTTTCGAAATATGATTCCCGGAGCTCAATGAG  
GTGCTCATGGCTGAACGCGATCGGGAGAAATTCCTTCCTCAATCAGGGCTATGCGGTCTTA  
AGAATCGATCCGAAACAGTTAGACCTCAACCAAGATGGGGAGTGTGAGTTTCATCGGAATC  
CTCAAAAACACTTTGCAGAAGACCCACCTGAGCACCTCAAGCAAGCCGCC

>RXA01523-downstream

TAAACACTCCAAGAACCACCATT

>RXA01525-upstream

GTCTCTGTAGAAATCTAGGGCTTTTCGACGCTTGAGCCCCGCGCACCTGCAAGGTGCGCTG  
TAGGGAGGCGTCGACAAGCATCTTTAAGTAGCTTTGAAGC

>RXA01525

ATGCGTTCCTTTCAATCGATCCTTGACCTGGTAAATTCAGCATCCGAGGTGGCTACCAAA  
ATTGTGTTGAAGCGCTTCGAAAAACGGATAACCAGCGAAACTGACTGGGTACCGTATCAG  
CGGTTTAGTCTTTGGTTCGGTTGGTTCTCCGCTAACGATCGAACGCAAAGCCCCGATGTG  
CGTGTGAGCAAGGACAACACTGCCGTTCTTCAGCGCTATCAAAGACCGGAAGCAGAAGGA  
CTGATCAGCTACTTCATGGATCCAAAGCCATGGATAACTGAATTGGCAGGCCTGAATCTG  
GACGATGTTTCCGAAGATACAGTTGCAGGTCGGACAGTATTAGTGGTTCCCTATCCAAT  
GTCATTCTCAGCATCGATGCGGAATTTGGGATGATTCTAACTGCGGAAAACGACATAGAA  
AAGATCCACGCAATATCTGTGCAACTCTTAGAAAAATGGAGATCATCCCATTACCTTGAG  
CCGCATTTTCTGACGCGGTTCTCCACCTGCGTCGACTGGAAACCGCAACCTCCGAGTT  
CTATGCCCTGAGTTTTCATTCCAAGTGTCACGTTGGTGATCAGGTTTTACTATTTTAA  
ACATTTGATCAAACCTGCCACCAGTAGATCAGCTTGAACTACTCGCCGCGGATACACT  
GATCCAATCCAGCTTGACTACGACCACCGCAATACAGGTTTTCACGCCGACGGTTGGGAT  
GCCATCATCTCCACGGTGGAGCCACTACACGACGAAGAAGAACTCACAGGTTACTTCCTG  
CACCGCCTTGACCCAGATAGCGGTACCCAACCATTCAGTCGTTACAGCAGCGCACTAC

CACGGTACGGACGCAATTATCGACGTGACCCTAGATGGTGTGCATCCACCCAAAAACCAA  
GAAACTCTTGAAGGCATCAGCACTAGTACCAGTGACGGTGACATATTTTGGCTCTCCGAT  
GAAAGCTTGCCTTTTCGTCCGTGGATTTCAGCGTGTCAACAGGCGAACTATTACACGAGATC  
TCCATCCCCACGTTCCAAGAGATCGTCCCTCGATTCCCGCTAATAGAGCCCGCGTAAACAA  
AAGCAATTGGCCTCAGGATTTCAGTGAATTGCAAGGGAAAAACATGGGAGCTTCCGGATCTT  
AAAGAAGTATTTCGAAGCTGTCCCTTCGATTCCAGCAGGTTGGAGATTGTTAGACAGCTTC  
GGGAAAAACTTGCACAATGTACACGCGAAAAACCTCGTCTTAATGACAACTTTTGGCTT  
CAAACAATCCTTAGGCTTAAACCATTAAAGCAGTAGATCTTGATATCGGCCGATCGATA  
ATCACAGCAATTTACCCATACGGTGATCGAATTTACTTACGCGTAGTAACCACCACATC  
ACGTTTAACCAGGACCTCGAGATTCTCAACGTAGAAGTCTTTGGCGACCCGTGAGGTTCCT  
GAATCTGGTCTAATTTATCTTCCACCTGGGGATTCTCCAACACTCGGTTTTCACCCGGA  
ACACTCATGATGTTTCATGAGCAAGAAGGCACATATGCTTTCACGACCCGTGAAACAACA  
GAACAAATAACAATGTGAACTTAGACAGGAATAGTTTTTCAGTGGCATATTCTTCCCGA  
ACCAAAATTGTTATTTCACCTGAAAAACCCAGAAAGCCGACCTACCAACAAGCTGTTGGTG  
TGGGAACCACAAACCGGGTGGCGAGAACAGAACCTGGAGCGC

>RXA01525-downstream  
TGAGCACGCTTAAGGTGAGGTGG

>RXA01527-upstream  
ATTTGGCTTTTTCGGGATGAGCGGAAGTTGGCTAGGCAGGCGCATGATTGTTGCCTGAGT  
TTGCTTTGAAGGAAAAGGCGGAGGGAAGGTCCACCCCAAG

>RXA01527  
GTGATTCCGAACCCCAACCCGAACCCCAAGCCAAAACCTCTTCGCCTCGTTTCAGCGCTG  
ACCGCCATCACTGTGGTGGGTTTTCAGCGCTTACCTGTTTCATGCGTTGCCGATTCCGTTG  
GATCCTTCTGATCCGGCGGTGTCGGAGTTGTGGGTGAATCCGAATGCGCGGGCTGATGAT  
GAGCTTTCGTGGTGTGGATGTAGAGATCTCGGATTTTGTTCATGCCGAATAGCAATCTAAT  
GTGCAGGTGGGGGAGTCTTTTAAGGCGCAGGTTTCGGGTGACTAATCGTTCGTTCGGAGACG  
TTGAGCAATATTACGTTGCAGGCGCGTCTGTCGGAGGCGTCTGTTGATATGGCGAGTGCT  
CGGGTGGCGGCGACGGATAATAATTATGGCTACTTCGGCGCGATGGTGACTCTTGATGAT  
GAGTTGGAGCCGGGGGAGAGTGTGAGACTGAGGTGGAGATTTCTACCGATAGTTTGTCTG  
ATTTCTCAGCCGGGTTCCTATCCGACGATGTTGGCGTGTCTCGGGGCGAGCTTGATGGGGTG  
GCGCAGCATTTGGATTTCGACGCTTTCCTTCTGCCAGTCCCTCAGCGATACAACCTGATACA  
GAAGACACCGCCACCCCCACGACGATGATTTACCCGATATCAGCCAGACGAATGTGTTG  
GGTGGTGAGACCGCGGAGGCGCGGAAGAGCCGCTTGTGCTGGTCAGTTCCGACGCGCTT  
GCGGGCGAGTTGGATGAGGGCGGTTCGTTTGCAAAAAGCTTATCGACGCCTACCTCCAGTCT  
TCACCCGCGGTGCAGCAAGCCACGTGCCTTGCTATTGATCCGCAGCTTCTTGATGTGGTG  
GATCGCATGACCGCGGTTACACCGTGACCGATACTCGTCCCAGTACGGTGCGGCAGAAT  
CAGCGGCTTCGTGAGTTGTGGACTGCCGATAATCAACCCACCAATGGTGTGCGGGGCACG  
GGTGCGGAAAACGCTGCCATTTTCTTGGAGAACTCCGACAGGCCACAGCCACCTCGTGC  
ACCGTGGCGTTGCCGTGGGCGAATGCTGATCTAAATGCAGTGAGCCAAACCGGTAATCAG  
TGGTTGATGCGCGAGGCGCTACAGCGAGGTGTCAACACCTTTGAAGAAGTGTGGGTGTT  
ATTCGGGAATCCAATGTGGTGATTCTTGAAATGGTTTGTGGAGCCCTCCACCGTGGGT  
GATCTCGGATGGGCGGAAGTAACGCTTAATCCGGATCAGGCGTGGGAGGTGCAGTCAGAG  
GAGTTGGTTGCTGCCCTGATGCCACAGAGCAAAAGCGCATTTGGATAACCCTAAGCCAACG  
CCAGGCACGGTGACGCCGCCAACCCCTATGTCAACGGTGTCCGTGTTGGTTTCTGATAAC  
ACGGTGTGGCGCACACGAGCGCGGATCGGTTCCACTCTTTGGCTCCGGAATAACTGGG  
GTGTCGATCAGGGATCGTTATCGGCAACCTTGGCTACCTTGGGACAAAACCTGAGACT  
GTGGGCTATTCGAATCCGGATTTCGCGTTATGACTACGCCATGGATTCTGAGAGCGCCCGC  
AATCTCACCGGCCAGGCGGCGCTGCGCTTGACGGTGGACAACGGCGATGAAGACTCTCCC  
GTGTTGATCATGCCGAGCGCGGTGCTGGGCGCCGAAGACGGCGCGATGTTGCTTGAGACC  
ACCGGGGCTTTGCTTGGCGACGGCTCCGCCCCGACCTTTTTCCCTGCAGCAATATGTCACT  
GCCAATGCGGAACAAAGAAATACTTTGGCCACAGCAACAACTCCACCGGATGACACTGCT  
TTTGGTGACCTTACGACGATCCTGCGTCAATTGACGGAAACCGAAATCTGCGAACCACCT  
CAGCAGGCGGAGTACATCGATGATCTCACTGGCATCATGTCCAATGATCCCAGCATTTGCA  
CTGACCCGTTATGGGTTTACAGCACCGCTGCGGCAAGATCTGCTGCGCGCGTTGAGTATC  
AGTGAGCGTCTGTTAGCTCGCCACACCCAGGCAACCTCTGCTGCCGATAAATTAATCT  
AATCGCAACCGCGATACTCTGCAGAAGCTGCGTAGCTCTGTGGCGTTGTTGCCGCCGGA

AATGTGTATACCCGAACCTCGGAATCGTCTCCGTTGTTGATTGTGGCGCAAAACGGTTTG  
 CCATTGCCCCGCGGAGACTCAGATTTTGTATTCCGGAAATCAGGATGCGCACATCAATACT  
 CCGGGTGTGGTTTCGTATTCCGGCGCAGGGTTCCATCACCTTGCAGATGACTGCGGATTG  
 CCCGATGACAATCTGCGCACTGATCTCACGTTGTGGTTGGCATCCCCAGATGGGGCCACC  
 ATTAGTGAACCTGTGGAAATTACTGTCCAGCCTCGCCCGAATTGGGGACCACGCTGTTT  
 TTCGTGGCAGCGGGCATTTCTGGCAGTAGGAGGGTTGTTGTTTATACGGAAGAAACGAAAC  
 GTCGAAAAGCGCTCGCCCGGTACGGGATCGCCCAAACCGCCACCAACCCAC

>RXA01527-downstream  
 TAACGTATCGCATAGTTATTTTC

>RXA01536-upstream  
 AGCATAGATGACTTGACACTGTTGCAGCAGGCGGTTTTCACCTGGCCTCTTAGGATTG  
 TCAAATGGTTGCAACGACGCCAGGGAAGGAGGCGCACCCC

>RXA01536  
 ATGGCATTGATTGTTTGTAGTAGACGTAAGAAAAAGAACAAAGACAAAAACCCGAATGAA  
 AATTACAGCAGTCCCCGCACACTCTGAAGATTACCTCAGGAGGTTTGTGAGGGTAATGGT  
 CGTCAGGTAGGCGACCCCATTTGAACAGCAGGTTGATCGAGATGCTAAAGGTCGTCTCACA  
 GCGGCGGATTTCTTGCCGGACGCTGATCTGCCACAGCTGAATCGTTCGCGTGCAAATATG  
 CTGCGCCGTGAATTGGAGTACCGTTTTTCACTCCAGAATGCCACATTAATATCGATGGA  
 AACACGGCCATGATTACAGCGTTCAGATGGCGGGGACGACATGTCTCGTTGCGCACCCCTC  
 GCGATGAATGCAGCTGGCCTTGATAACTTTGATCAACTCCCTGAACTGGTGGAAAGCTTC  
 GTTCACGGCAGCTGGCCGATGCAACATTAACGATCTTCTACTGCTGACCTGTATAAA  
 GCACTGCGCCTTCGCTGCTGCCAACACCTGGCGAAGGCGACGATCTAGTTGAGCATGGA  
 CTCGACCGGGGAAAGCCAGATCCGCGACGATTCAATCCTGCGCACCTTCACCTCTGACATG  
 TCGATCGCGCTGGTGCTCGATACCGAGCATGCCATCCGCATCCAGCCACTCAAAGAGCTC  
 GAGGAGTTTCGATGACCTCAGCGCCCTAGAGCGGGCTGCGGACCGCAATACCTGGCAAGAG  
 CTTTACGACGCAAAACGTTGACGCTTCCTTCGTCGACGCTGAATCAGACAGCGAAGGGTCA  
 TCATTTTGGGCTTTTCGAATCTAACTCGTACTACTTGGGTAGTGCAACCACTGTTCTCTAAC  
 GATCTGTTGGCAAAGTGGGCACCTGACCTGGACCAAAGTGATGGCGTCATCTTTGCTGTC  
 CCTGATCGTGATCTGTTGATTGCGCGTCTGTGACCACCGGCGAAGATCTGATGAACGGA  
 ATCACCGCGATGGTGAGGATCGCGATGCGCTTTGGCCTCGGGAACCCGACGTCGATAAGC  
 CCGCGCCTGCACCTGCTGCGCGACAACCAGGTGACCACCTTCACCGACTTCGCGCTGCTC  
 TCTCTGAAATGGAAGCTGAATGGGAAGACAGCGCGTTTGACGCGCCACCGGCCGCGCG  
 ATCGGCATTGAGGTGCGCCAGATCCGTATCTGATGGAGCGCCTCCAACAGGGCGGCTTT  
 GGTGATTTTCGAGATTTTCGGCAAGCCCCGCGATCTAGATATG

>RXA01536-downstream  
 TAGCGAAAAAGGGACCTTCACTT

>RXA01539-upstream  
 AAATGAACAGGTAGAAGAGGTTAGTGTGAGGTATCTTCTGTCCAGTCATTAACCCAGCC  
 TAAGACGTTGGGGCAGCTGCATGACCCAAGGAAAAATGTC

>RXA01539  
 ATGAGTAGCAGCGACTTGGCTTCTATTATTGGTGTAGAGCAACAGCCTGTTGCTTATGGT  
 GAGTCTGAGGAACCAGAAACACTGCGTGATGTGTTGCCCTCGGCGAAAGCTTCACCCATCT  
 GAGATAACACCGAGTTATGAGGTTGCTGATGGTGAACAGCGCAGCATTTTTTGGTGAATCA  
 GCTCCGCTCGATTTTGTATGACCTCAGTGATGTGCGAAGATTTGATACCAGTCATTGGGTG  
 CGTGCTGGACAAGATGATCGTAGTGATGATGATCGACTCGCTGATGAGGCTGGTGTACCG  
 CCTAGTGGCGCACAAAGATGTAGCTGATAATGAGGCTAATCTTTCTGGTGTGGATGAGCAG  
 CTGCACATGCGTGAAGTCCATGCACAGAGTTTTGACCCATTGACGTTGCCAAAAAGGAA  
 CGCAAAGCAGCGGAAAGAAAGTATGCCAAGCCACCAAAAAGTGATAATCCGTACCTAGCA  
 CGGGATGCCAAAGATGCAGCTGCTCGTAAGCGGAAGATCAATGCAGCTCATGATAATTTT  
 GCCCAAGAGATGGCACAGGCTGCGATGGGACCACTGCGCAAAGGGGTCAAACTCAAACG  
 GTGATGGCCGCGTGACGACTGCTGCGGTGATGTGGTGCATGAGCCACGATGACCGGT  
 GTGAACGTGGATATGAAGCGCAAGTTTAAACAAGGATCTGGAACAGGCTAAAGACACTAAG  
 TTGTGCAAGTATGTGTCCAAAGATTTTTGGAAGTCAAAGCTGACGCGCGATAAGACGGAG

AAGGAAGCGAAGTCGCTCTCTGATGCGTTCATGCAGCAGAAAACAGCGATCATCAGCAAC  
CGTGAACGAATCCCCATGAGTGTGCTTCTGCCGCGCAGACCGTGGTTTCGGTTGTCTGAT  
CAAGCGTATGAGGCGATGCGTGAAGTAGATACGGATGGTCAAGCGATAGTGGATGCGAAG  
GATGTCTCTGCACAGGTGGCAGAAGATATTGACATGGTGGTCAAGCAGGGTGAAGAGCAT  
GGCCTGAAGTCGAAGGATATTTATGGCGCTGCCCGCGATATTGTGGGTGCTCGCATGGAG  
CGCGATCCAGGCTATGCTGCCCCGTTTAAATGAGACGGCTTTTGGCACCGTGCAGCTGGGT  
GAACAACGACGTGGCATGGTGATTTCAAAGACCCCGACATGGCAATTCCCTGATGGTGCA  
GGTTTGAGTAAAAACGCCGGCTGGTTAGTGTTTCGTGAGCCGATGGGTAATGCGCAGAAC  
TTCGCTGACAACCTGGCTGCGACTTTGGCGACAGAAATGCCGGGTAGCTGGTGAGCAGTAC  
GGTTCGGATGGCGTTTCGTGATGTAGTTGCCGGCTTCATGACAGCGACTGATGTCTCAGAA  
AGTGGCCTCGCCCTCTGCGAAGAACTGTTACCTGACTTTGATACACGTGGTTCGCAGTGCT  
TCTCGGGTGCGCCAGATTGCTATGGCACAGCGCACACAGGCAGCGATCAAGGTGTTGCAG  
GATGATGGTAATCAGACCGCGATGACGACTGAGCAGGTCAAGGAGGTTTCAGGTATGGGCG  
ATGGATCAGGCTGAGAAGGTGATGCAGCGTGATCATCCAGCGATTCTGGATAAGTTTGTG  
CGCAAACATGGGCAGACATTTGGGCAGGATGCGGACGCTTTTGTAAATCCATAACTATG  
GAAAAAGACACGAGCAGCGAGTACACTGATGCTATGGTTCGACCTCAAGAAAATCGTGGA  
TCAGGTGCGAGAACTGGCAGCTCGTCGTGTCGTGTACAAGCAGCGCAAATCAATCAGGCAGCA  
CAGCTGGATATGAATGTTTCATGATTTCCGTGAATCGAATCTGCCAGAGGAACGACCCGCG  
AATCCTTATGAAGCGTATGTTTCGTGAGACTGAAGCGAAAACCAATGATCCGCAGTACGGT  
TAT

>RXA01539-downstream  
TAATAGAAAATGATAGAAAGAAG

>RXA01540-upstream  
CCATGCAGCACTATGGGTTCCCTGATCCCGATGCGTACTTTGACCATGCCACTATCGCAG  
GAAACACCCACACACTCATCACAAGAAAGTAGGTCTCACC

>RXA01540  
ATGACTTTTGCAGAACTTAGCTCACCGCGTACCATCATCGCTTTTAAATGGCCGTGCCGAA  
TCTGGCAAAGATACTGCAGCACAGTATCTCACCCATATGCACAGTTTTCACCGCATCGCC  
TTTGCCGATGGTGTCCGTGACGCACTCTATGCGCTTAACCCACTGGTCTGTGTGGAGCAG  
GCTATCACCCACACATGGTGCCATTTATGACCGCGTGGCCACTGTTGTGGACACACTTGGT  
TGGGATACCGCAAAGCAAATCCCCGACATCCGCGCACTTATGCAGCGTATTGGTACCGAA  
GCTGGTTGGCGCATCCACGGCGAGCATCTGTGGGTCAATCTTGCTATCAAAAAGATCAAT  
GAACTGCCCCGTGACCACGCCATTGTCATCACTGATTTGCGATTCCCCAATGAGATTGAG  
TGGTTGAACAGCCTCAAAGCCAACCCGATGAACACCATTCAGACCGTCAAAGTCATCCGA  
CCAGATCATGAATCGACCTTGACTGCAGGATCATTCGGTACTACCTCACATATTTCCGAA  
AGCTTTAATCTCACTACCGACACTGTGCTCCGCAACGATGGCACCATTGACGATTTGCAC  
TCAAAGCTGGCTGATTTTTTTGAGCACTTCCCCGCGAGCCCGTGCTCTCTCGTAACGCCCTT  
GTACCAAAACACAACGCACCGGCACCAACCACTGATGCCATG

>RXA01540-downstream  
TAAATAACCCCGTATCAAGATC

>RXA01542  
TGGGGTCAAAAAGATCACTGGGGCAAAGCTCCACTGGGTGATCACGATGCTGTGCGTATC  
TATAGGCAAGCAGAAGCCTTGATGAAACAGCGCGCAGCAAACAATAAGGGCTTAGACCTC  
AATGATGAAGCGACCTATGGCGCCATCATGTTTGCGTCTTTCGATGATGCCTTCGCCGCT  
GATGCCGAAGCTCATGGCTGTGTACACCGACCACAGTTTCGCGAAGGTAACCTAGGCGAAAT  
ATTCTTAATTCACCGCAATACACGGCGATTAAGTCATCTTATGACGCGCTGGTGCAGCAG  
GATCTCGTGGCCCAACAGCAGCAGGCACAAGCGCTACAGCAAGCTGCTTATGAGCAAGAG  
CAGGCAGCTATTTTCCAGGCACGTGATCAAGCAACATTCCAGGCTGAACAAACGCTCGCG  
CAAGAGTCCGTTCCGCAATCAGAGGGTGTGGGTTTACCTGTCAATTGATCCGATGGAGAGC  
TATTTCCGGGAGTACGCCTTCTATGAAGGTGTGCGAGATGTTTGGTACCTGGGGTACGCAC  
GTTGATGCTGGTGTGTCGAGTTTAGCACCTCTGATGGCCGTGCGATCCGAGCGCTTGTT  
GATGAGCATCTCGAACCTATGAACCACTAGAGCAGCGGGGAGTACTCAGGCATTCTTC  
GCCTCTGTCAATGCTGCCTTTGCTGAGGTGGCACCTCACGCAGCACCCATGTTTAGTGCG  
ATTGCTCGCGAGGGTGAGGGTTCAAAGGGGTACCAGGCGCTGCGTCACCGTTTCGACAAG



ATGGTCGGCACTGCAATTGGACCTAATGGTTTGCCTGAGGGACCTGATCTGGGTGGTCGT  
 CGTTTACCTATTTTCGCCTTATGATCCACGCTGGTCAGACCGCAAGTAGTCCGTGTGCAC  
 GGTACCAAGCTGCTATCACTGTCCGAAGAGAGTGTGGCATGATCAGGGACCTTGATCTA  
 GCAACGATCCACCTACAAGATAATGATGTTTACGAGGGCACTCATCGAGAAGACGACACT  
 AAAGGCGGTGTGCGACCGTTGACTCAATGGGTCAATGGTGAAGCTATTGCCTGGCGCACT  
 ATCACCGAGAATGACCAGATGCGACTGCCCAATATTGGTCAGTTTATGACGGCTAAAGAA  
 TACCGTGCCGACGCTCATGGCTGCGTGCTGGACTCATTGATACCGCAGATGTTGCGAGT  
 CAGAAAATTGACCCCAACAAGGTCAATGTCTGATGAGGGTATCGCGCGCTCGGAAGCTATT  
 TTGACGTATCTGTGCGATGAGGGTGTGGATTTTAGGATCGAGCCAGATCGTGAGCCGGGA  
 CAGCTTAAAGTGGCTATTGAGGGCACCCGTATTGATATTCTGCTCTACTGATACTCGCGCC  
 AATGAACAGTGGGTGGTGGTCTGCTATGATTCTGGCACTGTGATTAAGTATTCGCGCGAA  
 CAAACAGCGGAAGAAGCTCTACGAGCTCGTGAGCGCATGGAGAACGGTGATGGAACGTGG  
 ACACCGGCTACTGATTATGAACCAAGCCCAACTGAAGTTGTGATCTCGTGAAATTTGCT  
 CTCGGTCGAGAGGTTGAGCGACAGGATGGCAAAGGTCTTGTGGTGTGCCTAATGCTCGA  
 CACCCACGTGCTTTAGAGCAGGCACAGGATGCATATTTCACTAAGAATCGTTCCGCATTC  
 ATGGTGCGTGAAGGGCTCTCGATCGTTTCAGGATGCACGTGATCGAAGTGCTGGTCCTGGA  
 AAGTGGTTTGATAATGAAGCGAAAGCATCGGAGTGGCTTGGTAACAATATCGCCCTTACT  
 CGTGCGCGTGTGGCCGAAGAGCTCGGCGTTGAAGAACTGATTGCGCTTTCTGCACAGTAC  
 GCCGATGATCTGACTTCATGCCGGCTTTTGTCTGGTGAGGATGAGCTCATGGCGATAAAG  
 CAGGACTATTGGGCGATGCTGCGAGGTGAGGAAACCGATCTGCTTAACCCTGGGGTTAAC  
 CGCGATGATTATATGGCTGCTATCCGCGATGGTGATCATGAGCAGATTGCTGCGATGACC  
 TCAGCAATGAATGCTGTGACCGTGGAGGATCGTGTGCGTCAGCACGCGGCCCTTGTCTT  
 GATGATTATGTGCGCACGGTGGAGCCTGATCCTGTTACCGGCTTGCCTTTTAATCCGGTG  
 ACAGTTGCTCAGCACATGCCGAGTGCTAAATCCCTGTGGTCAAACCATGACGATATTATT  
 GCCGCGTTGCGAGCGACTTCGATTACTGGCGATGAACCTGCGCGGTGACGAATTCTATAAC  
 GATGTTATTAATCAACAGTTGCTCAAATTTAATCCTGAGACCGCGCAGAAAATGGTTAAT  
 AACCTGATCTTGACCCGAGTTGGCTCGATTTGGCACTGTGATTGCCGAGACTATTTCC  
 CGCAATGGTGCTGATGTGGTCGATATTGCTGTTGACGATAACGGTGTTGGTGCGGTGGACC  
 GCACAGCGACGTGTTGGTGCGAAGGATAGTCGTGACGATAGTAGTAAGGGGCGAGGTTGCG  
 GGTGAACGCACCCGTCATGTGACGGGTGAGATAGGTCAGATTTTACTCGCGGTGAGCAT  
 GGTGAATTTGTCACCAAATTTAATGGTGCGGAGAACTATATGTTTGGCCCTGGCTACACC  
 GCGTCTGTGGTACCACAAAAGCCTGGTGAGACAAAGAGTTTAGAAGAGCGTACCAAGCTC  
 AAAGGCTATGAGCAGGTGATGTGAGAGGCGTTGGTGTAACCGTGTGCGAGAAGATTTGATG  
 TTCCTGAGCGATCCCGAGTGGGTGCTACAACCAGCATCAACAGTGCATATAAGCGACTG  
 TATGACAATCGCTTCCCTGTGGACTTCTTCGAGCGCAGCGCCGAAGAAGGTTTGAGCGAT  
 GAGTGGCGTGCTGCGTTGACTTGAGACTGCGAGTTTGCGTGTCGCTACGACAACCTCTATT  
 CGTGATGGTGCGAATGTGATGGAGGATATTGAGCAGCAGCAGCGTGGTTTTGATGCGCGT  
 AATGATAACTCCCGTGATGCGCTGGTGCTTACCGGTGGGCGTAACATTTCTGTACTTGAT  
 GTTGATGCGGGTAAAGGTTTCTTTGATCCCATGATGACTGGTATGGCGGCGAACCAGGGT  
 TCTGTTGCTATTTGTTGCTTCTGCGAAGGTGGGCGTGATGGCATGATTACCCCTGGT  
 GATCCGGCTGATCGAGTACCTGTTGACGCGCATCCAGAATCATGGGCGATGGGCTTTGAC  
 CCACATGACCGTCAGAACATGACTTTCTCGAACATCATGCAGGCTAGCGCTGTGACTGGT  
 GGTGCACGCACGTGCGATGATACAGCTGGGCGGTGGAACTTTGAAGATGGCATTATTGTC  
 TCTGCCGATTTTGCGAATACCCATGTTATTTCGCGATACGGAAGATGAGATGCGCCCTTG  
 GTTGCCGGCGATAAGCTGTCTGATTTTACCGGTAATAAGGGGTGTGACCGCTCTTGTGTT  
 GATCCAGCGATGAGTGATGCTGATGCACGTGACGAGGGCTGGAATCAGAGGTGGCGTTT  
 TTCCGAGACAACCTGATCTAGAGGTTGTGATGAGTCCGTTTTCTGCCATTTCTCGTTTT  
 AATGGTGGCACGGCACGTGAGCTCATGACCAACCCGACAGGATGTGGTGTTCAGGAATAAT  
 GATGGTTCTACTCGTGTTCACACAGGTGCCCTCTGGTGATCTCAACTTCATCGTCACGCAT  
 ATGGCTGTTGATGCGAAAACCAATGTCTATGATGAAGAAGCTGTTTCGTGAGGGCCAAGGA  
 CGTAAAGCGTCTTCTCAGCTGGCGTGGGTGCTCCAAGCCAGGAATGTCATGAGATTATG  
 GAGCACTTTTATGGCAACAACGTCTCTGCATTGGCTAACTTCCAGGAATATCTTCGCGTC  
 ACGGGGCTTGATGTCACCCGATGAGTGAGTTGCGCGAGGGGTTACGCGAGTCCAATGAG  
 CAGCGAATATGATCATGAGATGCCAAGCATTTACGATGAGAACGGTGAGCTGAATAATCGT  
 GTTAATCGTGACAGGTGCGCGAAGCTTTTGTGAGCAGATCAGTCGCGCTGGTGGTGT  
 ATGGAGATTCTTTCCAGTTACAGTTGCGCAATGGTGCACAGCTAGAAGAGTCACCTAAT  
 AATCCAGACATGTATCAGTTGCCACTACTGAGCCCGCATTTGCGCAGTGATGAGGATTTA  
 GCGGACGGTAGTACCTCTCGACATGAGTACACCACGCGGTATATGGCTATTTTGTATACG  
 TGCTACAAGCTGGCAGAAGAGCAAGCCAAGATTGACGCATTGCGCCAGGAGGAAGCGCAG  
 CACGGCACGTTGCCCTCGTGCTGCGGAAAAGCGACTGAGCGAGTACAGAAAGTTGTTGAT  
 CAAGCACAGAAAAGGTGCAGGCAAGCTTTGATGGAATTGCTAATGATATTGTCGCCCAGC

CGGATCGAGACCAAGAACAATGTGTTCAAGGACGGCTTTATGTCGGCGCGACAGTCACAC  
TCCGCTACTGCTGTGTGGACAGGTGATCCACGCCCTGTCAGTTGATGAAGTAGCCATGAAC  
TCTTCGATGGCAGCTGAACCTCGGCGTTCTCGATAACGGTTATGCAATGGTGTGGCGTGAT  
CCGGTGATCCGCGATGGTGGTGTGCGCTATTTGCGTGTTGTTATTAATGATGATCTGCAC  
GGTGTGGCAGTCAACCCGTGTGTCGGTGAAGAGCTTTGACGGTGACTTCGATGGTGACTCT  
GTAGGCTGGTTCGGCAATCTGCGGAAAAAGGCGCATGAGGAGGCATTGTCCAGGCTCACA  
GTTGAGGCAAACATGCTTGATCTTGGTGATGGTAAGCGTATGGAGGACGGCACTATGTTT  
TATGGGCTAACTCTGCATGACAGCCTCGATGTACAGGTAGCGCAGCACCATGATCCGGCA  
ATGGCCGAGAACATGAAGGTTATTGTCTCTGAGCTTAACCGCTACCAGCGTGAATACGAG  
GCCGGCGAGATTAGCCGCGAAGAATTGCTAGAGGTCAACCGTGCACACATGGATGATCTC  
AATGAGCACTATGCACAGGCT

>RXA01543-upstream

GTGCTTTAGCCAAGGTGAGGCATCAAGAGAAGCAACAGCGTCGTTACCGTTTTTTTTGGTG  
GGGGCGCTGTTGTTGTAGTTAAAGAAAGAGCGGTGGGAAA

>RXA01543

ATGAGTTTGAAACAAGCCATTATCGTGCGCAATGAATATACGATTAAGCAGGCAAATGGC  
AAAGGTTACAGGATCATCGCCAGGTAAATATATCTCTGGCTATATGGCACGCAGCGAT  
GCGGTAGAAGCAGTAGCACCTATTGTGCGCAATAAATTAGATGATTTTCATCATGCGGTAT  
ATGGCACGTGATAGTGGCGTGGAGCAGCTACCCACGGACAGTAACGCAGACTATGACCAG  
CAACCTGAAATGAACCTCTCGTCTGGCCGGCAAGGTGCGCGCGGACCTTGAAACAACGT  
CGTGAGAACGCGAGCGCCGCGAGCAGCATTGCGAGCGGGCGTGAATACAGACTCCGAC  
ACCACCAACCCATCACAACCTGTGCACCCGAGGGAACCTCGCGGAATTTACTACCCAGGAT  
GGGCAGCGCGTTCATGATCTCATGCTGAGGGCTCAGGGTAATGGGGGAGTGGCCTTTGGG  
TATGGCGATGTCTCGCTGTACATGATGATCTTCATGCAGCAAGTAATAACGTCCAAGAG  
CTCTATGAAAATAGGCATACCGTGATGAAAGTGGTCTATCTTTTACCCAGGATTACCTG  
ACCGCGCATGGCCTTATTCAGAGGATCTCGATATTAAGCGTGCTGGTGATTATCGCGGC  
CAGGTTGACCAATGAAGCTACGCATGGCTGTCTATGCATGGTGTGGATCGTCTAGCCAG  
CGCTATTATGATGATTTGCGCTATGTCTGGCGTGATTCAGGTTGATACGAAGCATGTGCAC  
GCCCCATTGACCATGGTGGATGCTGGTTATGGACACCGGGCTGCTGATGGTACGCAAAAA  
GGCAAAATCAATAAGCCAGGTAAGGCTATTTTTCGCGCGTGGTATTGACGCCTGGCTTGAT  
CAGCATCAGCATATGGCGCACTTGTGACGAGCAGTGGGGTATGAAAAACGCAATGTCACC  
AGCTACGTCAAGCGCTGGGCGTTTCATCAGCTCACCAAGAAAGTGCTGCGCAATTTGTG  
GTGCGTTGTTTGGCAGAGGATAAGCGACTGTGGCGTGCATCGACCAATGCCAAGGAAATG  
GATAAGCCGAATAGATTAGTGCGCGAGTTGGTGGAGGCGCGACTTGGTGAGACTGATTCA  
CCGATGCCGGCAGCACTGTGCGAGGTCTATCAGTATGCGCAAAAACGCCGCGTTAAAGAA  
GGTTTAAGCAAGCAGGACACCCAGCGTTTGATTGATAATGGCCGCGAAAAGATCATTGAG  
CAGGCCATGAACGGTGCTACAGTGCTCTATCCGCGATTTCGATGAGCAACGCGATGTC  
TCTACGGCCATGTTGACAGTCATGCGTCAAGACTATGAGGATTTGCTCGATGGTATTGCG  
CGGAAGAAGAGCAAGGATCTAGACGAGCAGGGTAGTAGTGGATCACAAGAGGTGGGGAAA  
GAAGAGCCTGAGCCAAGTATTGAGGAATTTGGGCTGCGTTTTCGGTTCGTATTCAGCACGC  
TTGAATCATCACCGAGAACAACGAGAAGCCTTTGCCGTGAAAAACGCTCGTGGGAGGAC  
GCTAACTCTCAAGGTTTGGCTGATCCCACTCACAGGTAATGTGGAGTTTTTATGACACT  
GAGGAGCAGTATCATGCGATGTGCCAATCCAAGTACCAGCACTTTTGTACCTTTGCCCA  
CCTGTGCGTCACTGCGGAGCAATGGGCTGAGGTTGCTGATTACGGTAAAAGGGTGTG  
GGTCTGCGTCACTGCGGGCAGATCGTCTTTGGCACGCATGAGCGATGAACGTGCAGCT  
GAAGCTTTTGGGTGCGCAACTTTATGACCAACCCGGTGGTGGGTTATTGGCTCGAACAGGC  
GCTGAGGGTAAAGCTGGGCGTGGGTCCTGGATGGCCGAATTGAGCGCATGATGGTGACC  
TATCAGCAAAAAATTGATGATTTGCGACGAGAATGGGCACAGCTCGGTGCACGTTTAGAG  
GTTGAAGGTGATGCTGTATTGATGGATGCAGCAGATCTACGTGAATCTGGGGGAGAGGGT  
GCAGATGAACGCCAGATACAGCAGCAACAATTGAGTTGCCGGTTCGCTGATGTATCTGAT  
TCTGTGCGCACATACCTTGACGAAGAGTTACGTGATAGTCGTGATGTGAGCGCTCATGAT  
CCAGTGACACCTTGCGTGGCAGGTTTCAGGTGCTGTTTCGACCGGAGCATGATTTTGAG  
CAGGTGGGTGGCCCTGACCTGCGCGATCTTCACTATGCCTGGTTTAGCGATCAGAAGGTC  
AGTCAGCCCATTTGTGTGATGTTACGGTGAGTTAGTCACCCAGCGACGTTATGCTTTTGAA  
CGCGCTCGGGAGTGGATGATCAGTTGCGCAGGAAACCAGAAGCAGTGGCAGAAGAGCTT  
GATCATGCCGGCGCGGACATAACTCGCATGGAAGCAACCAGTAGTGAGGTATCCCGTACA  
GGTATTTTTCGCTAGTGCCATGCTTGCCAGAATTAGAGAGCAGGCGCGACAACGCGCTCAG  
CGTGACGCGGAAGAGCAGGCTCGTCTGAGCGTGAGTTGGTAGCACAGCGACAACAAGAA

ATTGATCAGGAGACCACGCAACCAGCGTTTCGAGGTGGTGCAACGACATGTACAACCGGAG  
TCGGTGCAGATTAAGCGGGGTAGAACAGTTGCGCTAGATAAGCGAGTGCAGCCACTGATT  
CGTGATGCTGTGGATCGAGCTGTGCTGGATTACAGCTGCGGAGTACCCGTGATGGTGGA  
TTGGGG

>RXA01543-downstream  
TAGGCGGTTGATTAAAAAAAAG

>RXA01544-upstream  
CTAGATCTATAACGAGGATCGGCGCTACTTTAAGCATGTTTGTGCTGTTGGCGCCGATTT  
TTTCATAGCTGTACACACATAAGGCAACAGGAGAAATACA

>RXA01544  
GTGAAACTTGACGACGCTATGGTCATGATCGAACAGCGCCTGGTCAAAGGTCGCGGCGCA  
ACCAAGACGCAACTAGCACCCCTATGAGCATATCCAGCGCAATATTGCAGCCCGAGGGTTG  
AGAGCCGATGACGGAGGCTCGTGCTTCGGTTATGGGGATGCGTCGCTGAGTAATGACGAT  
GTAGCAACTGCTGCAGAAGATATTCAGGATTTGTTTGCCTGCGGGCATACGGTTATCTCA  
GCGATTGTCGTTTTTTGATAAGAGCTATCTCAGTGAGCATGGAATCATGAGCTTTGATCCG  
AACTATTTTGGTCAGGATATTTATGCGGACACCCATCCAGAGATTGATCTCATGGAATTG  
CGTTTAGCCGTGATGAATGGGCTCTTGGGGCTTGAGGGAACGTTTTTTGAGGATATGCGT  
TATGTCGCATCTATCGAGGTGAGCCGGAGCTATGTCTATGCGCACATAATGATGGCGGAT  
GCAGGCGTTGACGATGCACGCGGTAATGCACAGGTGAAGATTACGGACACCGAACGAGTG  
CTGTTTAGACGTGGTGTGAATCCCGGTTTGTGGAGCAAGAGGCACGCAACGTCGTGCTT

>RXA01544-downstream  
TAGCCAAGGTGAGGCATCAAGAG

>RXA01545-upstream  
ATAAGAACCAGACGACGCCCCTCAACGACGCTGTTGCAGCAGCTCGCAACTAGCTAGTTA  
CCACGCCGTGACACACGATACGTAGAGAAAAGAGAAATGAT

>RXA01545  
ATGAAGCTTGCAGGTTTTAACACCAATTCACCCGCAGCGCAGCGGGTTGCCGAACAGGGT  
GAAAAGGTACAGCTCGATGCACCGGTGTACGCGGTGTTTACCCAGATGTTGTTGAAGTT  
GAGTTTATTGGCACGCAGCATGAGCCGGTATTGCACGTTGAGGGTGCCATCGACAGCGTG  
ACTGCATTGTCGAGCTACCGTACGACATTCAAAAAATTACGTTTGATTTCAGAAAACCAA  
CAGCGTTTTAGTGGATTTTATAAATTCAGTCCACAGCAGCATAAAGAGCTCATTGATAAA  
GGTCTGTATCTAGAAGGTTTCCAGCCACCGCGCGAGATGATGACGAGCCTGCCGTGGGAA  
CTACCCATGAATGCCGATGTCACTGTCTGTGGCACCAGAGTCGCAGGATGCGCCACCGATT  
GTGCTTGTGGGCTTATCTGAGATTTCATGGTGTGGATTTTAGTCAAGAATCCTCTGGCTAT  
GAGCTCACCAGCATGTTTGGAGACTACCGTAGCCAGCGTGAAGCGGGCGAGGCGGACAAG  
GATTTCTCTGAGTCAATTTCTCGTGACAGAGATTGAAGGCAAAGATATTTTCGCTGATGCT  
AACCGCACCCGTACCGGTGTCACTGTCAGTGCACATGCACAGCGCCTTGAGCAGGAGCGAGCGCTG  
AGCGCAGCACAGTTGATGGCGAAACTTGCTGGCATTTCCTTCCAGACTGAACCCGTGCTT  
GTTGGTGCAGGAAGAGAGCTTTGATGCTGAGCAATTCCTCGCCCATGATCTTGATGACACC  
GCTGGTATGAGTGAGTGGGAGCGGAGGTTACCGAGTTCTACAACGAGAAGATTTCGCGCC  
CAGGAGCCTGTGGTGGAGCGGGAGGCTGAGCGGGATAGCGATATTGAGACTGAGGTTGAT  
GCAGCACCAACTGTCACTGTGTCAGAGATTAACGATGTTATTTCATGATCTTGATGAGCTT  
GAATTCGATGACGTGATTGATCTTGATGCAGATGATGTTGTCAATACCGCCGAGGTAGAG  
GCGCCAGCAAGTGTCACTGTGTCAGAGATTTCTGCGACAGAGCTTGATTTTGATCGCGAG  
TCACGGGCTAAGACCGCGCAGCGAGAAAGCCAGCCGACGTGTTGCACAGAAGATTTCAGACT  
CAAGAATCTGTGCGTGAGGCATATATTCGCGAGCAAAAGCATGGCTATGACGCATCACCT  
GCGGAGGGGCGCAAGTTTGATGAGAAAATTGCAGAACGCGGGCTAGATCTA

>RXA01545-downstream  
TAACGAGGATCGGCGCTACTTTA

>RXA01546-upstream

ATAGTTAGTTGGTGAAGTACTGCTATTTGGGGGTTTTGTCTTTTAATATTATAAAAAAGAAAGTG  
ACAAACATACTTGCATTAAAAAGGAATTGAGATAGGCACT

>RXA01546

ATGGCACGAGCGAAAAATAAGAAACAGCGTCAATTGCAGCACGCTCATGATGCAGCACAG  
GCTGAGATTGCAGAAAGCGGTAGCGGTTAACACGGTTGAACCAATTAATGCACGCACCGGT  
GGATGGCCTTCGTGGGTGCGATAAGGTCCTGGAAGCTCACTGGTTCACTTGGTGGTTGGTTT  
GCTTTCTCTGGTTTTTGGCCATCGCCGTGTGGCCGGTAGCGATCCTTGCAGCTGGCACTGTG  
GTCACCATCATCGGTACGTGGGGAGTATCAGTACTGCCAAGTCTGGTTATTTCCAGCATC  
GGCGCTTCTGCTGGTGTGATTATCTCCACTACTGATGGGTTCTCTTTAGCTGGGTGATC  
CCGGTGTCTTTCTCATGATTGTGCTGGCACTGGTGGTCATGAAAGTGCTCAATCTTATT  
TTTGGTGCATTGTGGCGCTTCACCATGACTTTGCGACAGGGGTTATACGCAGGTCGTGAA  
AAGATTTCTCGCGACGACGCGAAGCGCGCAGAGCAGAAAAGAAGCTGACTAAGCAGCAG  
GCTAAAGAAGCCAAAAAGCAGCGCAAACCTTGATGCCATTTACTCGGCTCAACAGGCTGAA  
GAGACTCTGGCGCAACAGGCACAGTCTGAGCCAGAAGAGTCAGACGATAAGAACCGACAC  
GACGCCCTCAACGACGCTGTTGCAGCAGCTCGCAAC

>RXA01546-downstream

TAGCTAGTTACCACGCCTGACAC

>RXA01547-upstream

TGCAGCGGGCACTAGAGATCGCTCAGCTGAACAAACAGGAGAACAGATAATGACGACACG  
AAATGTAGATAACCAGAGTGGTGTAACTGAGGACGAGCCG

>RXA01547

ATGTTTCGATCAGGTCAAGCGCTTTTTTGTTCGCAATATCGTCATGATCATTCGCTTGATC  
TTGGCAGTGGTGGTCATTATTGTTGCCACCAGCACCTCTGCGGATCGACATGCTGTACTT  
AAGCGTCAAACCTGGTGAGATTATGGCCTTGCAACAGGAACGTGATGCATTAAACAGTAAG  
CTTGAGGGCCAACCTTGAGCAGGTGGTGCCTGACGCTACCGGTGGTATGGATATTGAACAC  
AAGGCTGCAGATGATGCTGTTGTTTCGAGAATTTTTGTCCATGGCGCTGACGTGGGACAGC  
GTGCGCGACTACCTTGATGTGCGCGAGCAAGTGATGCGGGTTTATGACCTGGATGAAGAA  
TCACAGTTTATGTCCGTGTTTTATGCCTGGTGAAATGGCGGGCATTGCTCGCACCGATCCA  
ACTGAGCGAAGTGACATATGCTTATGATGCAGATCTGTCCAACCGCTTTAGCAGCTTAGAA  
TCCGTGGTTACTCGCATTAATGGTACAGAGTACAGCTATGTATCCACGGTGACGATGAAG  
TCGAAGCGCTCTGGTGGTGAGGCAGAAACAACCTCTACCTCACGCCCTGCCTATGACGTG  
ATCGACGGCAAAATTCGTAACCTCGAAGCACGTAAGTGTCCCCGGTGGTGTGAAATACTCG  
GGC

>RXA01547-downstream

TAAAAGTTTCTGGGGCAACCCCC

>RXA01548-upstream

GGCGTGCAGAGCTGCTGGTTGGCGCTTGTGCACCCCGTTTTTGTGTAATAACTTATATTCT  
AGAAACTTCAATAACTTAGTAACCTTAAAAGGGGTTAAT

>RXA01548

ATGGCTGAGAATAATGGCGGGTCGGATGACCTTAAGCCCATCTCTGTGATGGGGTCGTC  
AATGGGGAAGTGCGCAGCGACAAAGAAAAGCAGGCGTTTCGAGAAGATTACCGGTGATGAT  
CTGCGTCGTCGTGCAGAACAAATCCGTAAACGTCGTTTAGCAAAAGCGCAAGAAGATGCA  
CGTAAGCGTAAGCCATTGTTTGGTTTGGGTCGTATCGCTGTACAGTACTGGCTGGCGCC  
GTATTTATTGGTACAACGTTGTGGATCAGTACCACCTCGGGCGGCTTTGACGACAAGGTG  
AGTGCAACAATGAGCAGATTGTCACTCTGCGTAATGAAGTCAACGACTTAAAAAACACT  
GCAGAGACAATGCCCCAAAAAGAGACTCTTGCTAGTCAATTTGACGCAGCAACCTCACGT  
GCACAGAATGTGGCTGACTTACAGAATCAGTTAGCCGGCATTATTACAGTGTTGATGAT  
GATGCCGCGACCGAGCAGTTCAAGACAATTTGTTGATGAGCTGAAACCGAAATTCACGGTC  
TCTGCTGGTACGACAGGTGAATTTCTGCGGCGGGTTCGTTGGTACCAGCCACAAGAAGTT  
GTTGTCCGAGATAACAACCGACCCACCTGGGCGCCGATGGGGGCTGAGTCTTGGGGATGG  
ACTGTGACCCCTACACTGTGATGTGAGATACCGAGCACGTTGTGGTGATGTGGGAGGCC  
CGCTTGACCGGAGGTGAGCGTTACGGTGCCTGTTGGCGTGGGTGACAGCCGATTACAAC

ATCAACACCGGCGTGTCTTAGCTCGCTGGCGTTGGCGCATACCTATGAAGGACACCAGCGT  
ATTGGTGCACACCTCACCAAGTGAATTTGGTGCCACGGCACAAATGCAGAGGCGAGC  
GCTGCACGTGCTGGCAGTGAAGGCGGGGGGCTTGAGGGCGAGGCTATTTTCGTTGATGAG  
CTGCAGCGGGCACTAGAGATCGCTCAGCTGAACAAACAGGAGAACAGA

>RXA01548-downstream  
TAATGACGACACGAAATGTAGAT

>RXA01549-upstream  
CAGCTTGCAATTTGCTATTAGTGGCGATAATGAAAGCGATCGCAAGGTTTTTCTGGAAA

>RXA01549  
ATGGTTGATAATAAAAACTCCAGTAGCAATAGCCCCACCGCAGCGTCCGAGTACTTCCTG  
CGTGAGTGGGAGCGCCCGGAGATGTCGAGGTAAATGCACCCATTCGTGCAGAGCAAGCA  
TCTAAGTGGTACGCGCAGATGGGTGGTTGGCAAAAGAACTCAACCTTGGGTGAGTCTGTG  
ATCGCTATGGCTGATGGTGCAGCAGCAAAATCCACGGCGCGTGATGAGCAGGATGCTCTT  
AATGATTGTCTGAAGAGGACCGCACCTCAGGTGGAAATACGTCCGCTGCAGAAGCAATG  
GTGACTATTTACATCCTTATCTGGCTGATTCTCGTGGCAATGACGGTACTGATATTTAC  
CGCTATATCCATGATGAAGTGCTCACCGGTGATCCGTATTACGCATCCTGTGACCGTGGC  
GTTGCTACCGCTATTTCGCTGGTGGGACAGGATGATACGTTCCAGCAGGTCCAACAGCA  
GCACAGTATGAATACGTTGTGGGCACAGGATCGGGCCGTGGGAGGAAATCGGCAATCTT  
GCCACCATGTCAGAGAACGATTTGTTACCTGGCGATGTGCTTCTTGGTGCACCGAATCAC  
GTTGCGATGTATGTCAGCAATGAGGTTGTTGTGGACATGTTGGGCCCTGGTAATGCAGAG  
CCTAATGCAGCTATTGGTCATGCATCGTTGAATGACCGCTCACCTGGTCTGGATACCTTG  
AGTCTGGATGGATGGGGCGTGAACCTCAAGGTGTTCCGCAACACCCAGGCTGAGACAAAC  
TCAGTGTTCTCTGGTGTACAGATTCCGGCTGGTAAAGAAATTTGGCGAAATGACTAACCCA  
ACTCGAACTACTCCTGCAGGA

>RXA01549-downstream.  
TAAGTTTTTTTCATCGCTGGGTT

>RXA01552-upstream  
ACTTTGCTCTTTTTATGGCGCTGCACGAGATTCAACTCAAAGTGAAGGTCAGCTATTTGA  
ACTCAGTGCAAAAGATGATCGGCATACCAAATAATGAAG

>RXA01552  
ATGTATCTGGGAATGAAAGAAGATTCCCTAGCGCCACCCCAAATAGATTTCGAGTCTCAT  
AAGACTGTCTTTTCCCTAAACAGAAAAACATCCCAATTAAGGATGCTGCTAAATCTGAT  
CAGGTGAATCTCACTTGGCATGATTATCCAGGTGAATGGTTTGAGGGTGGAGCTGTAACG  
GACTCGGAAAAGCAGGATAAAGTTGAAACGTTTAGAAACCTGCTGGGCTCAGATGTAGCG  
CTATTTTTAGTTGACGGTCAAAGCTGCATGATTACGCCAATGAAGAGGAGCGCTATCTT  
AGCTATTTATTTGATGGATTCAATTGAAAACCTAAATCAGATCAAAGATGCAATCCTGGAG  
GGTGGGAAACAGCTCCAACAGTTCCCACGAATTTGGGTAATTGCTTTATCCAAAGCTGAT  
CTATGGCCAGATCTCCAAGTAAAAGATTTTGAGAATCTACTTAATAAGAAAGCTGGCAAT  
GAAATTATTGCGCTGCGTTCAAAGCTTTTGGAGTTATCGATAACGACGAAGCTTTCTCC  
TTCGGTAAAGATTTCTTTTGTCTCTTTCGGCGAAGTTCCTCCAGGCCATATTGATATA  
AGCCAGCGCAAGGGTGTGATGTCTCTCTCCCGTTGGCTTGTGTATTGCCCATGCAACGC  
CATTTGTGGTGGCAGGAGCTGAAAGTTTTGCCAATTAACCTGGCTGATATACTTTTGGGA  
AATGAAATTGCCCAAATGGGTTTCAAGATCGTTTCCAAAGTTTTGAAAAACAAAGTATCT  
GGAACAAATAACAAGGCGATGGCGGCATTGGTTTTTCGCTGAACCTGTGAGGGATATGGTT  
GATCAGCCAACTGAATTGCTTCAGAAGGCTCGTGAGGAAGCCGTCGGAAGGCGTGAATTC  
CTTAAAGCGATTACTGCAGAATTCACCAGGAAGCTGAATCAAGCCGAAGCTGATCAGGTT  
TTAGTTCGGGACTTTGCA

>RXA01552-downstream  
TGACACTCATGTGGGCAACCCGT

>RXA01554-upstream

TGGCTTAAACCTTATTTGTAGTTGTCAATAAATATGAAATTCCTTAGCAACTTGTTTAAA  
TAGACGTATAAAACAAGTTTGAAAAAGGAAGGTTATCCATC

>RXA01554

TTGAAAAAGCATGTGACCTCAGCCGTTACCGCCGTGGTGACGGCTTTTTCAACGGCTGCG  
CTTGGTTTAAAGTATTGCCGTTTCTCCTGCTGTTGCCCAAGTGGCTAATCCAGCTCCAGAT  
CTTTCTGCGCCGTATACATGGGTGGAAGAGTTTGATTCCGAGGATGCTCTCAAAGGGTGG  
AACATTTTCCGCCAGCCAGATTATGGCAGCGACAAAGTTCTCTATACCGAAGATGCTTTA  
AGTATCGAAGATGGCAAGCTCACCATCACCCTCAGCGCCACTGCGTTGACGAAGACTTC  
GCGATCAGTGATCCTGTCAACCGCGGAAAGCTCAATGACAGCACCGCGCAAGTTGAACCT  
TGTGCTCCAGGTCAGTTTGAAAAGTTCAACAGTGCGCGCATCGTCACTCCGAAAATTGCT  
CGTGGAGAGTTCGACCTTTCTGTCACTGCAACTCTTAACACCGGTGGCGTCGAAGGTGTC  
CGAAGTGCCATTTGGATGCAAAACGGTGAACAGGCGTGTTCCTCAGCAACCAACAATGGC  
CTCTACGGAGAAGCTAGACCTGGTAGAGCACTTTTCTTACGATCTTCGCTCGCCATGGTCT  
CCATCAAAACACCCACTTGGGTTGTGATCCTGAAAAGTGTCAACGGCACCAACCGTGACCT  
CGTGAACCTAAACTAGATGAGTCACTCGATGGCGTGGAGCACACCTGGACTGTGAGCACC  
ACCCGCGACGGCGTTGAGTACTTCATTGATGATGAGGCGATTAACCGCCAGTCATGGCGC  
AACGATGTCACTTTGGGGCATGCCGAAATTGATGATTTGCGGATCTCCGCGCAGACGTTT  
GATGAGATCGTCGACCGCGAATGGACTCTCACTCTTAATCAAAAGGTAGAAAGCGCCGAC  
TGGGCAAAACCACGTTCTCTGAGGAAGATTTCACAGTCCGGTCCATGGTGATTGACCGC  
ATCGAGGTCACCGGATCTCCCGCAGTATCTGAAGACACCCCATGCCAGATACCAACCCAG  
CTTTTGACCCAAGACACTCTGGAATACCTCGGTGCGATGCCAGTGCTGGAACGCTACGAG  
CCAGCAAGTGCTGATTTTGGCCGATGGCCGCGAGGCCCTTCCTGGAACACTTCAATTTGAAG  
GAATCGTGCGCAGAATCCAGAACTCGAGCAACGCCCAGAAGCTGTGCAATTGTTGATGGA  
CGCATGGATATCGTGACCCGTCGCCACTGTCTGGCCACCCTGATGACATCGCCACTCCG  
GAAAACGCACAGGAGGAACCGTGCGCGCCGGGTGAGGTGACACGCTACAGCTCAGCGCGT  
GTCCACCTTCCAGAGATCCCCGCCGCAACTTCCGGCTCACCGTGCGCGCACGGGCGCAG  
TCCGAAGAGCTTGTGACGGCGTCCGCCCCGCTATCTGGATGCAGAACAATACCAACTTC  
TGTGCTGACAACGATGGACGCCCTTATGGTGAACGGATATTACTGAGTTCTACAGCTCT  
CGTGTGAACACCCAGTACTCGGCAGTACACCTGGATGTGCTGGCAACCGCCAGAGATG  
AAGCTTCGCCAAATGGAAATGGAAGAGTCCATGTTTGGGGATTGGCATGACTGGGGCGTC  
GAAGTCTTCGACGGCCAGATCGTATTACCATTTGACGGCAAGGCAGTAACCTTCCTCTGGC  
AAAGATGTCCTTTGGCAACTCTGTTACCCAGCCGCTGCACCTCTTCGCCCCGCGCACTTC  
AAGTTGTCGGAAGAGGAATACCGTGAAGTCATCGGGCAGCCTTGGCACCTTATTTTGAAC  
ACCATGGTGGAGCAGTCTGGCAAAGACAGCTGGATTACAGCGGTGACAATAACGAGGCG  
TTCCCAGAACACCGCTTCCAAATTGACCATGTGGCAGTAGATATCGAGTCTGACTCTGTG  
GACAAATGTATGGCCTGACGCTGCGAATGAAATCCCAGACAATGTTGGTATTGAAGACTCT  
GATGATGGCAGCGACCTGGAGGTTGGTTCGACCGGAAGCTCTACAGCTGAGACCGTGAGC  
TGGATCTCGTTGTTCCACCGCTTGAGCTCGCTGGTCTTACACTGGCTCTCAATCAAGAA  
GCATTGCAGAATTTGATTAATCAGTTCATGAGACAGTTCAAG

>RXA01554-downstream

TAATCCTTGTGGGCGCTTTGTCT

>RXA01557-upstream

TAAAGGTGTGAAAATAGTTCCCTCACGTGGGGAACATACTGATCCTTGATGCGTTAACTT  
GATTGACGACGAAAAATCAATTGAAAGGATCGGGGACTCC

>RXA01557

GTGCGAAGCAGCAATCCCGTTTTTAGTTCCCTTAAGGAAACTCAACGTCCACAAGGCCAG  
AACCCATACGGTGGTTACGACAACCTCGGTGGTGTCTACCAGCAAAACGTAGCTCCACAG  
AAGGCGGAGCGCCCAATGACTGTGGATGATGTGATCACCAGACTGGTATCACTCTCGCG  
GTTATTATCGTTTTTGCATTGGTCACCTTTGGCGTGTGGTTGGTTAGCCCCGGCCTCGGA  
ATGATCTTGACCCTTGTGGTGCCATCGGTGGTTTCATCACCGTTCTGGTCAGCACCTTC  
GGCAAGAAGTACGGATCTGCGGCAGTCACTTTGATTTACGCAGTATTCGAAGGCCCTCTTC  
GTCGGCGGAATTTCCCTTCTGCTGTCCGGCTTACAGTTGGTAACGCCAACGCAGGTGGC  
CTCATTTGGCCAGGCAGTCCCTTGGCACCATCGGTGTATTCAATTGGCATGCTGTTTGTATAC  
AAGACTGGCGCTATCAAGGTCACCTAAGTTCAACCGCATCTCACCGGCATGATGGTT  
GGCGTCTGGTTCTTGTCTGGGCAACGTTGTATGGGCACTGTTCACTGGTGGCGCAAGC  
CCACTGCGTGACGGTGAATCATCGCGATTATCTTCTCCCTCTTCTGCATCGGCCGTGGCA

GCATTTCAGCTTCTCTCCGACTTCGATGCAGCTGACCGCTCGTCCGCGAAGGTGCACCT  
TCCAAGATGGCATGGGGCGTTGCGCTTGGTCTTGCAGTGACCTTGGTCTGGCTCTACACC  
GAAATCCTACGTCTGCTTAGCTACTTCCAAAACCGC

>RXA01557-downstream  
TAGTTTACGCAGCACAAAGACCCC

>RXA01560-upstream  
ATGGGAGCAAGGCTCATTTAGCTACTTCGACGTGGAAGCGCACATCGTTGAGTTGATTCC  
TGCATCAGTAAGCGATGCGTTTTAGGCACATCTGCGATCC

>RXA01560  
GTGGGCGTGTCTACATCATCGCCGGCGATGAGCAGCTGGATATGGCAGAAGCCGTTTCGC  
AAAATTGGGGAGACCTTTAAAACTGAGGAAATTATCCTTGGTGGCGGAGGAACCCCTGAAC  
TGGTCCATGCTCCGCGACGGTTTGTGCGACGAGGTTAGCATCGTGATGATGCCAATCGCC  
GATGGTGAAAAGCACACCCACTCTTTGTTTCAAGCCGATGAAAAATACTCAGCACCGTTG  
CCGATCGGTTTTTCACTCGCCAGCGTTGAACCACTAGAAGATGGAAGCGTTTGGATGCGT  
TACGGGGTCAATGGCCCAGTGGACGCGAAC

>RXA01560-downstream  
TAGGTAGCAAATACTCGCTCTTT

>RXA01574-upstream  
AAAAATCCGCACACCCACATTGCTCAAAGGAATTGACAAGGCGCTTCGCAAGGCCGAGT  
AAGGTGGGCAACGAGTCGGTGAGAGTATGAGGAATATTTG

>RXA01574  
ATGAGCAACAAACGCATCGGTGTAGTGATCGTTTTCTTACGGACACGAACAAGATGTTGCC  
AACCTGGTAGACACATTTGCAGATCAGCTGAAAACCTGGTGACCGCGTAGTTGTCTGTTGAC  
AACCGCAAACCTTGGGTGTTAAAGACGCCGTGGGGGAGCGCCTGGAAAAACACGGCGCA  
GAGATCATCAACCACGACAACGGTGGTTTTCGCCGCTGGCTGCAACGTGGGCGCAGCGCAC  
ATCGTGGATGACGTGACCTGCTGTTCTTCTTCAACCCCGACACAGTGATCGACGATCCC  
ACCCTGTTCAATTTCGCTGAGACGCGTCGATGAACAGTGGGCAGCATTCATGCCGTACCTG  
CTGCTTCTTGACAGCACCATTAACTCCGCAGGCAACGCCCTGCATATTTCCGGAAGTGTCTG  
TGGGTGACTGGTCTGGATGAAAAACAGTTGAAGGCTCATCTGAAGTTACCGATATTTCC  
ATTGCCTCTGGCGCCTGCCTTGCCGTGCGCGTGGACTGGTGGAAACGCCTCGGTGGCATG  
GAAGAAGTGTATTTTCATGTACACGAAGACACTGACTTCTCCGCCCGCTTGCTGCTGGCC  
GGCGGTGCAATTGGTCTCCTGCATTCCGCGTATGTCACCCACCATTACGACTACGCCAAG  
GGTGACTACAAGTGGATTTACATCGAAGCAAAACCGACACGTTTTGCTGCTCAGCGTGCTG  
CCGCTTCCATTGCTGTTCTGCTGCTGATCCCGCAGATCCTCGGTGTGAACCTGGGACTGTGG  
GCGATTGCCGCAAAGGAAAAGAGGGTCCGACTCAAGGTGAAGTCCCTTCGCCTCCTGATC  
CGCGATCTACCAGCGATTTTCAAACCTGCGTAGGAGCACGCAGGAGCTTGCCGAAGTACAC  
CCATCGCAATATCTGGCAAAAATGGAATGGCGCCTAGACAATCCCAACCTAGGCAACATT  
GGATCCAACAAGATTGTTGCGACTGGATATAAGACCTATTACAAGTTGTGTATGAGTATC  
CTGAAATTGCTCGCT

>RXA01574-downstream  
TAACACCCCATAAAGAGGGTGAA

>RXA01575-upstream  
GCTGTTTTTTGATGCATCCATGATAGGAATAGAGCCTAGTGATGATGGCTGATTTTCCT  
GTTAGGTGCCACCGACCCAGTGATGATAACTTGATTGTC

>RXA01575  
ATGAAATCCATTGATCTTGAGCAGCTGGCGGGCACGCAATCGCGCACGTATCAATCGCGA  
AAGATCACCGATGAGATGGTCCGCCGGCCGGTGCATGTGGCGATCGCGCTGTGGGAAGTG  
CCGTGGGAGTCGGCAAAATCCGGCAAGATTGAGGGTTGGGTTCATTGCCGTGGATTCCGCCG  
CGTGGGCGGTTTTGTGCGCAGCGGGCAGACCAAAAATGGCGACGCCGTCAACCGGACTGTG  
TCGATGCTGAAATCAGCGTTGAAAGGGGTCCGCGGGAAGGCGTGGATTGTAAGTGGGCGT

CGACAAGCAGCTTTACGCGCAGCCCTGGTGC GCGGAAAACTACCTGGTCACCGGAAGCTTC  
 GCCGAGCAAAATAGGGCCGGCGTGAAGGCGTCGGCGATCTCGCGCCGCGCCGAACAATCC  
 GCGCTCTACAAGGCGAAAAAATCGGCGAATTCGCCGAGCGCGCCCCACGCGTCAAAGAG  
 CGGCAAGAGGCACATTGGTGGCCACGGTTGTCACGCACGCAAGGCACCGCAGGCGTTTAA  
 CGCTTAGCGACGGACGCCTCTACCGATGGGGTCTTCCGCGGCGCCATGTGCTTCGTAGCC  
 TCAAACGGCGACTACCTCCTGGAGACCCAAGACACCACCGCAAGCTCCGACGAATTAGAA  
 CTCGAAAGCATCACCCACGCCCTGATCTACCTCAAACCATCGGCGCGACCCAAGCCATC  
 ATCGAATCCGACAGCAAAAGCCGCACCTTGAAGCCATCGACTTCATCCTCAACAACCGACCG  
 CGCCGGGGCAGGTGGCGCGGCATCACCGCATGCGCCCGCAACCGGTTCGGGGATGCCTGG  
 GAAGCGCTTATCGACGACTGCGTTGTGGAAATTATCCCGCGTACTAGGGCACGCCGGGGAT  
 CCACTGAACCAAGCAGCCGACCAATCGCATACATGGGCATGCGCGCCGTAAATTTTGAA  
 CAAAAATCCGCACACCCACATGTGCTCAAAGGAATTGACAAGGCGCTTCGCAAGGCCGAG

>RXA01575-downstream  
 TAAGGTGGGCAACGAGTCGGTGA

>RXA01577-upstream  
 CCGTAGACATCCTCTACACCGAATACTCCATGAGCAAGGGGCAATCCCTGCTCAACGGCG  
 TAAACATCCTGGCCGACGGCTTCCTAGCGAGGAGACTCCC

>RXA01577  
 ATGACGCAGACCACCACCCAAATCATCATCCAGATACTGCTTCTCCTGGCAACCGCAGCA  
 CTGGCACTATATTTTCCTCCGAAACCGCCGCAAAGCCCGCGCCAAAGCATGGGTGAAAATC  
 GGCTTCGTAGTATTCAATTTTCGCCGCAAGTATGGGCAGTGCTCCGCCCCGATGACCTCACC  
 CAACTAGCCAACCTTGTGGGCGTGGACCGCGGCACCGACCTAATGCTTTACGCCCTGGTT  
 GTGGCATTATGTTACACGCTGTCCAGTTATGTGCGTTTCCGTGAACAAGAGCTGCGT  
 TATTCCAAGCTGGCCCGCGCTGTGCTTTGCAAATGTGGTGCTGCCGGAGGATTCCCAG  
 GGTTCGACCCCGCT

>RXA01577-downstream  
 TAGGAAAGCGCTTGGCCTCTGGA

>RXA01579-upstream  
 TGGCAGCATCCTGCGCAAGGTTGGGCAGCAGACCATTCATTACGGCGAATACACCGGTCA  
 TTGTGAGAAGGGTGCTCAGCAGCAATGCCAGGTGCGTCG

>RXA01579  
 TTGACCGAGGTATTCAACACTGACCAGCGGGTGCTTAACGCGCTTTTCAATGTTGTAGAA  
 GAAGATGACTCCGGCGATACCGATGATGAACAGCACAAACCACAGAATCCAGTTCGCGGC  
 ACCGAGTTTGCCGGCCTCGTTGAAAGCCATGAGCAAAGATCCAAATGGACACCGCCAGTGG  
 CAGCACACCAAGCCAGTCCATCTTCGGGGTTTCTTCAGCGGTGGATTCCCTTCACGCTGAA  
 AGGCAGTGCGAGGGCAGCGACAGCGCAGAAAGCAGCCATGACCCAGAAGATGGAACGGAA  
 ACCAAGTGTTTCAGCCAACCAGCCACAGCAAGCGCGTCCACGCCGCCGATACACCGTT  
 GACAGAGGTAACAATTCCGAGAAG

>RXA01579-downstream  
 TAGCGCATATTGCTTTTCATTGG

>RXA01585-upstream  
 TGCAGACTGCTGCGCCCCGTTCCATCAGCAAGGTGGAGCGCAAGGTGCTGACCGCTGTGCG  
 CTAATGATGAGGTGCAGTCGCAGGAAGCTCTAGAAAAGTA

>RXA01585  
 GTGGTTGAGACTCTTTCTATCACCTCAGGTGCGGCTGGCCTGCAGGCGCTTGTTGCGCGT  
 GCGGTTGGTTTGAATGAGTTGGCGAGCGCGCTTTCCGCCAGCTCACGCCAGAGGTGCGT  
 GATGTTTTTGTACCACTCCGTTCAACGTGACGGCGTCGCGCCGGGTATTTGGTGTGGCG  
 GGTGCGGATGGCGCTGCAGTTGGCGCGAAGGATTTGCTGCAGGCACTCAGCGAGGGCCGG



GAAGACGTAGGCACCTCCCGCGACGCCAGCTGGCCGGGCTCATTGCCGCCAGCCACGGGC  
TTTACGCTTGTCGACGAACCTCCCAACCCACGTGGTGCGCACTTTGGCTGATCAGGGTCAG  
GCATTGGCTCGCCAGTTCTCCGGCCCGCTTGGCCCTCCGGCTTCGTTGATGGATCAGGAA  
GTTATTTTCAGCAGAAGGCAATGGCAAGAAGGCCGGAATCCCGATGCGCACGGTATTTACC  
TGCACTTCGCTTGGTTTGTATCCCAGGTTTGTAGGCAGCCAATGATGTGCCGAGGCACCTG  
CGGGTATCGGTGAATGGTCGTGGACCCGCGTTGATGCTCCCTATGGCAGTGTATATCAC  
TCGTCAGGTTTGGGTCTGAGCGTTTTC

>RXA01585-downstream  
TAAAGCAAGACCCAGCCTGCAAG

>RXA01586  
AACAACGCGCGCTTCATTGAGATCGCGCAGGAAGCTCGATTGGCGTTTGCGGAGGATCAG  
TTCCGTGAGCGTGGCTATGAGATCCCTGCTGTGTTTGTGCGCCACTTGGAAGTTGATTAT  
TTGCGTGCGATCTTGCCGGATACCAACCCAGGCTGTCGTGGAGACACAGGTGACCAAGATC  
GGTAATACTTCTTCAGCACTCGTCAAGAGGTCAAGGATCGTAACGGTCGTGTGTGCTGC  
GTGGTTGAGTGCGTGAGGTGGCTGTCAATGTGCAGACTGCTGCGCCCCGTTCATCAGC  
AAGGTGGAGCGCAAGGTGCTGACCGCTGTGCTACTGATGAGGTGCAGTCGCAGGAAGCT  
CTAGAAAAG

>RXA01586-downstream  
TAGTGGTTGAGACTCTTTCTATC

>RXA01587-upstream  
CATTTAGACTGGTCGGTGGACCCGTTCTTAGAATACTAACAAGACATTCAGTGAGAATAT  
GGCTGGTGGGCAGACCACAGAAGGAACACCGCTTGGAGGA

>RXA01587  
ATGACTGATTTCTTCGGGTTGATCTATAACTGGTCAGTGAAGTGTGGGCTGGCTCATCGGT  
ATTCTGTCTCCATTGGTCTGTTTATGATGGGTGCGTTGATGTTTCGACGCATGGACAAG  
GGATCAGCGTTTAAAAAGGTTGTTATCCGCGTCGTGTACGGTGTGCTTGGCCTGCCACTG  
CTTGGTGTCTCTTATACCGGTGCGCTGGATTCTTCTCGACAGCGGTAGTTCCACAAGT  
GCTGGATCAAATGCGACAAAGATTGTGTTGTCCACCTACGTGGATTCCAATCATGGGCA  
GAAAACACCCGTATGCGTGTCTCTGACAAAGTAACACTGGCGTGGAGTCTGGAGGATCAG  
GCGCCAACAGGGCAGTCCATGCGGATGGTACGCAATTCCGGCGTTGGAAATTAATGCTCAA  
TCAAATGAGAGTTTTACTACTTTTAAGAATCCAGGTTCCATGGATCTAGGCTATAGCATG  
GACTGGATGGAAAAGATGGCGGATCCAGCCAATTCTGGCACCGATGGGACCTCATCAAGT  
TCGGCGACGACTATTTTCCAGGGAACCATCGCGCTACTGAGTCGTTATATCGACAACGAC  
AGTATCTCCTCTGGCAGTTTCGAAACCTCTATTTCGAAGTGCGATGGAAATCTTTGACCTCG  
AAAGAGGGAAGTGGCGAAGCTGTGGCCGGTGGTGATGTAATGGCCTGGGTTACTGGTTAC  
AACACAGCCTCTGGTCTTAATGAGATCACTGCTGCTGAATTAGCTGATGCGAACAATCCA  
TTGCTTGAGGTGACGCACTCAGCTGGTCTGCAGGGACGACCTATTGACCGCAATGCGGTG  
TCATTTAAATCTGGTGATGCGACAGCGTCATGCAACAACCTCAGTCGTGACAGGTTCTCGT  
GCTGTGGTGGGGACTACCGAAGTGACTGCAATATGTCGCCCTTGACGATGTACAACCTC  
CTCAACACCTCATTCCATCCAGCTGATGCAAGTGTCTTTTCTACGTCCACTTCTGCGTCA  
AGCTACACCCGTGCATCGCATAGCGCAGTGAGTCTTATCGGTTCTGGTGCCATGAACCTT  
GTGTACTGGTTCTCTGCAATGTCCCTGATGGGTAGCTTCATCGTGATCGGTATCGGTTAC  
GCCGGTGCCATGCTGTTTAAATACGATTTCGACGCACGCTGTCGCTCATTGGTGCCGTTTCT  
TTTGCTGCGATGGGCTTTATTGCTGGTGTGGCCAAGGTCATTGTGTACACCATCGCTATG  
CTCGTAGAGGTTATCGGAACGATCATTTTGTACCAGCTCATTACCCGGTTCTTGATGGCT  
GTACCAGCACTCTTTGAACAACCTTTGGCTGATTCTTAAGTAGTAACGAGAGTGCTGAG  
CTGGTTGCCGGTGCTGGTATGGGGCTAGTCGGTATGGCACTAGCTACCTCAGGCAACTGG  
GCGATTGCCGGCATGGTGATCACAGTGGCCTCATCCATGGGGGTATCATCTTCACGATT  
ATTGCGATGAAGGTGCGCGGATCTTTGGTATCAGGTGTGATGAAACCGTGACCAAGTGT  
ATTAACCGCTTCTTGATACACAGGTCTCTTCTGCAGGTGCTACCTCTGGTGACGGCATG  
ATGCGTGTGTCAGCCGCAACGGGTCTTGGTATTGGTGCGACACATATGGTACTCAACCGT  
GATGGTGACGGTGGTGATCTGATTACAGGCTCTGGTGATGAGGTGGCGGTAGCGATTCA  
GGCTTGGGTGAGAAGGCTGCTGGTCTGGCGAAGGTTGTCAACAAGTGTGGCTGGTGCCGA  
TTAGTCGGTAAGTATGCTACGGATGCGCTCGATAATTATGCAGATGGCGTTATCAACGGC

GACGGTGATGGTGCCTTCGCAGCAGGTGGTGACGCTACCGTTGATGGCGACTATGTAGCA  
GATGGAGATGCAATTGCTTCTGCTGATGCTAACGCTGATTTTGTAGACGGGGTTGCTGAT  
GGT

>RXA01590

GGCAAGTTGAAGGAATATGCCACCTATATCGGGCGCTGATCCGGCGCAGGGTTTTAAAGAC  
GTAGGTCAACCAACGCGCTGCGTAGCCACTATGAGGGTTTCGCAGAAGGCGACT  
GCAATTAAGGTGCTCTTTACCGGTGTGGCTGGTAAAAAAGAGCAGGAAATGGTGGCATTG  
TGCCGCAATCTTGGTCTGACCAAGGAAGCTATGGCTGCATCAGCACCGGCACAGCAGTCG  
ATTCTGCAGGCGAAGCACGACCCGATTGACGCGCTCTATCGTGCAGAACTCTTATGGGA  
CCAGTAGGTGATCTCTACCAAGGTCGCAAGATGCGTCGTGGTGAGAATGAGCAAGGTCGC  
TATGAGTGGGAAGTCGTTAGGGACGAGAACCACCAGCCTATCCAGGCCACCAAGGATGAA  
TGGGTACAGCAGTACATGGAGATGTACGCCGATGACAAGGGTATGGGTGTCTCGGTTGGC  
GTTGACCAGGTGGAGAAGATCGCGGAAGAATTCTCTGATGAGCAGGGTTATATGCGTGTG  
CTTAGCCATGATGAGCTACCCACTGAGATTAAGCCACTAGCACTTGATCAGCTTGCCTAT  
GGCGATAAGAAGAACCGCTTTGATTTGTTGTGTCGAGATGGCAAAGCAGCAGGTCAACATC  
TACGACGGTGATGCTTATGACTTTGCCCTCGTGTGGTGCAGCCTAATATGAAGGCAATG  
GAGGATGCAGCGCGTTTGGTATCCCTGATGTGGAGATTCAGTCGATTTCTGCACAGCAG  
TCATTGGCGAGCTTTGAGCGAGTCCACAAACGTTCTGGTTTCCGTATTGAGCGTCGTGTG  
CCGGCAGAAGTAGGTACAGGGATTGCTGCACCAGCACCGTTACCTGATGCAGGTGTACAG  
GGGAATTATGTTTACGACAGCAGGTGCCTGCGACCCCGCCAGTTATGCCGTGTACACCTCCG  
GCACAGCAACCTGTTTCGCCCTGCTCAGACGGACTTCCGGGGCGTTGGTCAGCCACTCGAC  
CAGGGCGGAAAAATCGGGAATTATGGACATCAGGGACCTGCAATGGGGGCGCAACAGCCA  
GTTGTGCCTCAGCAGCAGAATATTCGGCCTGTGCATAATCCGGTACCACAGAATTCTGTT  
CCGCCTACTCCGGTTGTGCCGAAGCCAGGTACAGGAAACCCGTTTACTCATGGTGGTGGC  
AACAATCAGTTTATGGGTGATTTGATACAAGCCGTTACAACCAACAGGAACCACACAA  
CGACAGGATGGCGGGTTTGAGCTC

>RXA01590-downstream

TAAATAATGGCAGTAGATTTTCAG

>RXA01592

AACTTCGACCGCTCTCGTGACAACGATCGCTCAAGCGCCCGCACTCCTCGTGAGACCGC  
GGCGATCGCGGTGGCTACCGAAACTCCCGCGGCAACGATGACCGCGGAAACTACCGTCAA  
AACCGAGATGGTGAATCACGAGATCGCGGCGGATACCTCGGTGACCGTCGCGACAACCGC  
TCAGGTGAATATCGTCAACGTGACGATAGGCGTGACGATCGTAGGGACAACCGAAGCGAT  
GACCGCCCGGTGGTTACCGCTCCGATCGCAACTTTGACGATCGCAACAGCAACATGCGT  
GATGATCGTCGCGGCGGCGACCGTTTCATACAGCCGTAATGATCGCTCCGATCGTGGCTAT  
CGTAGCAATGACCGCTACGACCGTAATGATCGTCGCGATGACAACAGGGACACCAGGGGT  
GGCGATCGCGGAGACCGTCGCTACGACAGGCGCGATGACCGACGTGATGATCGTCGCGAT  
GATCGTCGTGGCGGACAGGGCCAGGGCGTCCAGGTGGAGATCGTCGACATGCGAACCGT  
GCAGGTGCAGGTGCGGATCAGCAGCGTGATTGCTGCATCCACAGCGCGCTGGTTTCCGT  
GAAGAGCGCTTGAACACTCGTCTCAATGAGCCTGATTTGCCGGGCGATATTGATATCAAG  
GACTTGGATCCTTTGGTCTGCAGGATTTGAAGGTTTTGTCTAAGGACAACGCAGATGCC  
GTCGCAAAGCATATGATCATGGCTGCGACCTGGCTGGCCGACGATCCTCAATTGGCACTG  
CGCCACGCCCCGTGCTGCGAAGGATCGCGCGGGACGCGTGTCCGTGCTGCGTGAGACGAAC  
GGCATTGCTGCTTACCATGCTGGTGAGTGGAAGGAAGCTCTTTCGGAGCTTCGTGCTGCG  
CGCCGATGTCGGGTGGTCTGGTTTGATTGCTGTGATGGCTGACTGTGAGCGTGGCTTG  
GGTCGTCTTGAGAAGGCGATTGAGCTGGCTCGAGAAGAGGATTTGAGCTCTTTGGATCAG  
GATAACCTGATCGAGTTAGCGATTGTTGTTGCTGGAGCACGCCATGATTTGGGTCAGCAT  
GACTCTGCGATTGTGGAATTGCAGAAGGTTAATCCAAGCTTGAAGAGCACCGGTTTCACC  
CATTTCTCGTTTGTCTTACGCTTACGCCGATGCGCTTGTTTTGGCTGGTGGCGATGAA  
GCACGTGAGTGGTTCCAGCACGCTGCCACCTTGGATGAGGACGGCTACCTCGATGCAGAG  
GAGCGTATCGAGCAGCTCGATAATGGGAACAAC

>RXA01592-downstream

TAGACTATTGGTCTAGAGTGTA

>RXA01595-upstream

AATACTTCCTGTGGCTGGTTAAAGATGGTGGCGCTTCAATGCCGGATGACCAGCAATTGT  
CGGCAATGATTGACACGGCTGTAAAGGAAGGTCCGCAATA

>RXA01595

ATGACTGCAACCCACGAACGCTGGGGAACTCAGGCGAGTTTGTGCTGGTTCCACACACCGGG  
CGTTCTTCCAATATGAATCCGCCATCTTGGCAGCCAAGCTGCTCGACGATGCTGGAATC  
GATGTGAGGGTGCTGATCAATGATGCAGATGATCCAATTGCAGAGCACTCCGTTTTAGGC  
CGTTTTACCCATGTCAGGCACGCTGCAGACGCCGCTGACGGCGCAGAACTAGTTCTGGTG  
CTGGGTGGAGATGGCACCTTCTCCGCGCAGCAGATATGGCCCACGCTGTTGATTTGCCT  
GTTCTGGGCATCAACCTAGGCCATGTGGGATTCTTGGCTGAATGGGAGTCTGACTCACTT  
GAAGAGGCACTCAAAAGTGTGATCGACCGCGATTACCGTATTGAAGATCGCATGACCTTA  
ACTGTCTGTTGTCTAGACGGCGGTGGAGAAGAAATCGGCCGAGGCTGGGCTCTCAATGAG  
GTCAGTATTGAAAACCTAAACCGCAGGGGAGTGTCTGATGCAACCTCGAGGTAGATGCA  
CGACCAGTTGCTTCTTGGTTGGGATGGCGTGCTGATTCCACCCCAACCGGCTCCACC  
GCTTATGCATTTTCCGCCGTGGTCTGTACTGTGGCCAGAATCGATGCCATCTTGGTG  
GTTCTTAATAACGCCACGCGCTGTTTACCAAACCGCTGGTTGTGAGCCCAAATCCACC  
GTAGCTGTGGAATCCAATTCAGATACTTCAGCAGCGATGGCCGTCATGGATGGTTTCCGT  
CCCATTCTATGCCTCCAGGATCCCGTGTGAGGTCACAGGGGTGAGCGTCCCGTGCCT  
TGGGTGAGGCTTGATCTTACCGTTTACCGACCGACTTGTGAGCAAATTAAGGCTCCCC  
GTTACCGGTTGGCGGGTCCGCAAAAACAGGCGGAAAATAAAGATCCCAGGTCAGCGGG

>RXA01595-downstream

TAATTGAAAACCATTCGAACAA

>RXA01597-upstream

GAGTAGAACCCTCTCGCCGCCAGTGCATAAGAGTTTTCTTGGAATTTTTTAGGCGCGC  
CTCCACCAAAGGTTGAGACTTTGGTTCCACAATGGGCTGC

>RXA01597

ATGAGTCTGTTCAACCGCAAAGCCGACCTGCCCGCCTGCAAGGTGCCACCCGAATCTGC  
ACCCCGCAGGGCAAAGGGCTAAAGCGCTGTCCGAAGGCGATCTCGCAATCATTTGATGCA  
CCAGATCTATCCAGGACCTTCGCCCAACGATTGCTAGCAGCAAAACCCGCCGAGTCCTC  
AACGTTTCCCGGTTCCACCACCGGATCGGTGCCCAACTTTGGACCGCAAATGCTTATCGAC  
GGCGGCATCCAGCTCGTGGAAGGCTTTGGCCAGGAGCTGCTCGACGGCACCAAAGACGGT  
AAGAAAGGTGCGCTGACAGAAGATGGACAGCTCTTCTACGGCGAACGACTGATCTCTAAC  
GGCAGTGTCTCAGTGGACCTGCGGCTGAAAATGCATTTGCAGACGCCAGCAATCACTG  
CTGGACCGCATGGAAGCCTATTTCGGCAACACCATTCAGTTCATTCAGTCTAGAAGCACCG  
CTCCTGATCGATGGCCTCGGCATTCCCGATACCCGGAATGCCATTGAAGGCCGCAAAGTT  
CTCATTGCCCTCACCAGGGGATAACCACCGCAGCAGGCTCAAAGAATCCGCAGCTTCATC  
CGCGAATACGATCCAGTACTCATCGGTGTGATGGGGCAGCAGACACCTTGGTGGAATTG  
GGGTACAAGCCCGCGCTGATCGTCGGCAATCCCACTGGTATCGGCGCAGATGCGCTGCGC  
AGTGGCGCCAACGTAATTTTGCCAGCTGATCCAGACGGCCACGCTGTTGGTCTGGAGCGC  
ATCCAGGATCTTGGCATCGGTGCGATGACCTTCCCATCCTCAGTAAATTCCTCCACGGAT  
CTGGCGCTCCTGCTTGGGATTTCCACAACCCGAGATGATCGTCAACGTCGGCGGTCTT  
GTCACCTTGATGGTGTTTTTGAAAACCGAGAAGATTCCGATCCCGCGGCGCTTTTGACG  
CGCGCCAAGCTAGGCACCAAGCTTGTTCGACGGATCCGTCATCGCAAGTCTTTACACAGTG  
CGCAGCTCCAGCAACCTTGGATGGATGTGGGCACGTGTAGCCATTTTGGTGGTTCTTGCA  
GTCGTGATTGTTATCGCTGGCACCGCAGGATCAGGCTCTTTTACCGACAACCTCATTGAC  
ACCTGGAACAGCTTCGCGCTGACAGTGCAGGGTTGGTTCAAA

>RXA01597-downstream

TAGGAAGGCAACATGGCTAAACG

>RXA01598-upstream

CGCTGGCACCGCAGGATCAGGCTCTTTTACCGACAACCTCATTTGACACCTGGAACAGCTT  
CGCGCTGACAGTGCAGGGTTGGTTCAAATAGGAAGGCAAC

>RXA01598

ATGGCTAAACGACGTGGAAGAGGCGCCGCAACCTTCGCCGCACTGGGATTTGGTGCAGCA  
 GCCGGCATTGCCTTTTGGAACCTTATGTGCTTGACCCCAACCTTCCTGAAAACATTGACCCA  
 AATGCACCAACATCAGCTGAATTAGTCGAGGCAGAGACCTTGGCTGAGGTTAATGCGGTG  
 CAGGCCGATCAAGCAGACAGCATCATTGACCACATCGTGGAAGACGTGGTGGCTGGCACA  
 CTGACCGATCGCCCCGTACTGGTGATGCGCACCGCTGACGCTGAAGAATCAGACGTTGCC  
 GATGTGTCATGGCTGTTGTCAGCAAGCAGGAGCTATTAATGCTGGATCCATTACACTTGAG  
 GAGAATTTCTTCTCCCAAGACGGCGCGGACCAGCTGAAATCAATCGTGGCAAATACGTTG  
 CCTGCAGGCGCTCAGCTTTCTGAAACCCAACTGGATCCAGGAACTCACGCTGGCGAGGCA  
 CTTGGTGCCGCTTTGCTGCTCAACCCTGAAACTGGTGAACCACTAGCCAGCACTGCAGAG  
 CGCGGACTATTGCTCAACGTGCTGCGCGACAACGGTTACATCTCGTACGAAGACGGCACC  
 ATTTTGCCAGGCCAGGTCATCGTGATGATTACTGGCGATAGCGACGGCTCAGGTGATGGT  
 GCCTTCGCTGCAGAAACACAATCGCTGTTTGCTCGCGCACTTGACGCCCAAGGATCAGGC  
 GTGGTGGTTGCAGGACGTATTCACACTGCTGCTGATACTGGAGTTATTGGACGGCTTCGT  
 GCCAACCCCTGATGCTGCAGAAAACGTCTCTACAATTGATTCCGTGAATCGTACTTGGGGC  
 AAGATGGCTACCGTGCTATCAGTTCGTGAGGAAGTAGCCGGTAGGTCTGGAGCGTTTGGT  
 TCCGCTGCCTCCGCAGACGCGGCAAGTCCGTCTCTCGATGGAACGTCAGCAGCGCCAGCG  
 CAG

>RXA01598-downstream  
 TAGGTTTCCAAGCCTTTAAAC

>RXA01600-upstream  
 TGAGTACAAATCTCGTCCAACCCATGCTCATCCACTGTTTTACGGCCTGGTGAAGACCGC  
 TTTGGAGCTGCGTGTCACCCCTTAGATCTACAATGTGATC

>RXA01600  
 ATGGTTTTCGAAGATGCACATTCCCGGTACCCATGAGTTTACGGTGACAGATACTGAACTG  
 TTGTTAGAGTCCCCAATTTTGGGCGTTTCGTGAGATTCAATTGATCATGCCGGGTGGTTCC  
 ACTGCCCCCGGTGAAGTGGTTGAACACTTTGGGGCGGTTCGAGTGGTTGCCTTTGATGGT  
 GAAAACATTGCGATGGTCAAGCAGTACCGTTCGACGCTGGGGGATTCTTGTGGGAGCTG  
 CCTGCAGGTTTGTGTTGATATTGCTGATGAGGATGAACTCACGGGCGCGCAGCGCGAGCTC  
 ATGGAGGAGGCTGGTTTGGAGGCCAGTGAGTGGTCCGTGCTCACTGATTTGATTACCTCG  
 CCTGGTTTCTGCGATGAAGCGGTGCGTGCTTTCTAGCCCGAGGCCCTACAAAGGTTGAG  
 CGCCCGAAGGTTATGGGCGATGAAGAAGCGGACATGATTAACAGTGGGTTCGGCTACAT  
 GAGGCAGTGGGAATGGTGTTTAGTGGCCAGTTGGTTAACTCCATTGCCATTGCGGGTGT  
 ATGGCTGCTGATGCTGTGATTGCGGGTTCGTGCGTCTGCGCGTGCCGTCACCGCGCCGTTT  
 ACCTATCGCCCTACGGCGTTGGCGCAGCGTCGAAAAGCGCACGGCATTGTTCTTGACATG  
 AAAAACTA

>RXA01600-downstream  
 TGAAGGCTCGCGTTTATAGCGAAA

>RXA01602-upstream  
 TGCAGGCCACATGCCTCCAGTGCCGTCTCTGCACGTTGATTTTCCCCTGCCACGACTGG  
 TCGCAGGGCGACTTTCTAGCACTTTTAAAGGAATTTTTTA

>RXA01602  
 ATGGCTAAACCCCATATTCGGTTACAGGACCTTTCCCTGTCATACACCTCAACCCCGTTA  
 ATTACGAAGCTCAATATCACTGTTTCTTCTGGACAGTGCGCAGTGATTGTTGGTGAGAAT  
 GGTGAGGTAAAACACACTTCTGCGAGCACTGGCTCGAGAATTCCCAGCATCTGCAGGT  
 GAGATTCTCACTCATGGCACGGTAGCAATTGCTCATCAACACATGCCTGCAGGTGATCTG  
 TCCGTCGGAGAGATCTGTGATGAGGCAATTCGTGATTCAAAGAATGCTCTCGAAGAGCTT  
 GAGAGAGCTGGAGCTCTACTTGAGACAAACACTGCGCACGCACTTGATGGATATCAACAA  
 GCCCTTGATGCCGCTGAAGTGCTTGACGCATGGAACGCTGAACATCGATTAGAAAAAGCT  
 CTGCGCAGCTTTGGCGCGATCACCGATAGATCCCGTGCACTCAGTGAGCTATCGATCGGG  
 CAAAGGTATCGGGTACGGCTGGCCTGCCTCATCGGTGGCGATGCTGATATTTTGCTTCTC  
 GATGAACCCACCAATCATCTTGACCGGGGCGCGTTAACTATCTCACCAGGCCATAACC  
 TCCCACAAAGGTGTGGTACTTGTGTTTCTCATGATCAAGCACTGATCAAAGATGTCGCG  
 GATTTTCATCATCGATATTGATTCAACCCAGACGGCCTACCACGGATCTATCATGAGGGT

TTTGATTCTTATCGACGCCAAAGGAGTGCGCTTCTTGAAACTTGGAGGCAGGATTATGCC  
GCTGCACAACTGTGCAACAGCAATTGCAGGAGGATCTAGAGCACGCACGCCAGCGGGTG  
AATTCTTCGTGGAAACCTCCAAAAGGAACGGGAAAACACACTCGCGCATCTCGGGCTCCC  
GGAGTGGTGCAGGCCTTAAAGCGAGCACAGGATGCGTTGGATAGCAAAGCGTTGGACGTT  
CCCCCGGCTCCGGCCCCATTGCTTCTGCCTACCTTGAAAGTGCGACCAGATAAAACCCATG  
GTGGACTTTTTCGGACCTTTTTGTACCCACCGCTTGCCTCTGCCAGGCTCACATTCAAGTG  
GTATCAGGTGACAAAATAGTGATCACTGGTGACAACGGCGCTGGCAAATCAACGCTCATC  
GAAGTCTTGTCTGGGGTTTTGACTCCGGCAAGTGGTTTCGGTTGCAAACCATGCCCGAACT  
GGGGTTCTCGGCCAAGAATCACTTGTTCGGCGAGGTGCCATCAATAGCACGAGATCACGCA  
GTTAAGTGGGGACTTTTAAGTGTGAGGAGAGCCGATTTGCCCTACAGGAATTCTCAATT  
GGTCAACGCAGAAGACTAGATTTGGCCATGTGCTTAGCTGGCAATCCTGAACTGTTGCTT  
CTCGATGAACCTTCGAACCATCTGTCTATGCACCTGGTTTCCGCACTTACAGAGTGGCTG  
GACACGACCGCGGCTGCAGTGATCATGGTAACGCATGATCGACAGCTACTCCGCGATACG  
GCTCATTGGAGGCACATCGAGTTGAAATCT

>RXA01602-downstream  
TAAGAATTTCGAAGGGCTTTCAC

>RXA01605-upstream  
AGTCAAGCGCCGAAGAAAGGCCCGNGAAGGNAATCAGACGACGGGCACCTACTACTTCGG  
CATTGAAATTCCGAAGAACTTCAGCGATTCTATTGCCAGC

>RXA01605  
GTGACCAGCGATTACCCGCGCCAGCAACCGTCAACGCGGTATTCAACAACAGCAACGGC  
TTCATTGCCTCCATGCTGGGCAACCAGGTGGTCAACACTGTTGTGGAGACCATGGACACG  
GAATTCGGCGTCCGCATTGTGGATAACATGCTCGTTCGGTTTCTCCACCTTGGGCGACGGC  
ATGAACCAAGCCGCCGAAGGTGCCACTACGCTCAGCGATGGCGTTCGGTTCCGCCAACGAC  
GGTGCAGTTCAGCTTGCCGACGGCGCGGTACCCCTGCGCGACGGCATCGCAAGTGCCAAT  
GAGGGTGCGCAATCGCTTGCCGACGGCGCCAGCCAGCTCGACACCGGCCTCGGCTCCGCG  
GCTACAGGCAGCCAAACGCTCGCCGACGGTCTATCCAGCCTGCTGCGGGCACCGCCCAA  
CTAGGCCAAGGCGCAACCCAGGTTTCAGATGGCGTGGGCCAACTTGTGACCAAGTAGCA  
CCACTGACCGCCTATGTTCCAGACATCAACTCTCAGTTGATCACCCCTGCGCGACGGCGCA  
GCCACCATTGCCCTCTGAACATCTGATCCCTCCAGCACCTACCGCTCCGGCGTGGACTCC  
GCTGTGAGCGCATCCCAGCAACTAGCAGCCGGCCTGCAAACCCTGAAAGACGGATCCAGC  
CAACTCAGCATCGGTGCACGCACCCCTCGCTGATGGCACCAGCCAATTGGCCGCAGGTTCC  
GAACAGCTAGTTGTTGGCGCACAAAGCACTGCGCGACGGCACCGTCCAGCTTGTGAAGGC  
TCCAGCGAACTCGCCCTCAAACCTACCCAGCGCGCAAGCCAAGTACCAACCTTCGCTGAC  
GGCGCAGACACCACCATCGCAACCCAGTTGAAACAGAACAAAGCAGGAGACACCACACCG  
CTCTTCGGTATTGGTCTCGCACCATTTCTTCATGGCTGTTCGGCTGTTCATGGGAGCAACC  
GTTGCCTGGATGATCCTGCACCCAATCAGTCGCGCGCACTCGACTCCCGCATGGGAGGC  
TTCCGAGGCACCTGGCAAGCTACCTTCCATCAACAGTCTTAGGCCTTGGCCAAGCAACC  
ATCATGTGGGCGAGTACTGTACTTCTGCTCGACCTCAATCCAGCTCACCCAGCTGGACTG  
TGGATGGCGATGGTCGCCATCTCATGGGTATTCTATCTCCATTACCCATATGTTCAACAAC  
GTGGCAGGACCCCTCCGCAGGCCGTGTGCTGTCCATCGTGATGATGTCCTTCCAGCTAGTC  
TCCTCCGGTGGCCTATACCCACCAGAAACCCAGCCAGCATTTCTTCCACTGGTTCCACACC  
TACGACCCGATCACCTACGCAGTCAACCTCGTGCGCCAAATGATCTTCAACGAAACCCCA  
TCCAACGACCCACGCTTCATACAAGCAATCTGGGTACTGCTCTTCATCTGGGCACTGATG  
CTCGCCATCTCCACCCTGGCGAATAGAACAAACAAGGTTCTTCGCATGAAGGACTACCAC  
CCAGAAGTGAAGGTC

>RXA01605-downstream  
TAAAAGCTTTTCCCGCCCGGTTT

>RXA01610-upstream  
CATTAATCACATGTGGTTAATGCCTTTTTTGTATTGCGTAGACTAGGAAGGTACGTCAACT  
TCCATATCTTTAGTTTGCGAAAGCGATCAACTTAAACAC

>RXA01610  
GTGTCCGGTTTTCTTACTCCCCAGCTACACCCCATATTTCGGACGGCAACTGCCAGTATT

GCTACCGCAGTTGCCGTAGCACTGTCAGTGTTGCTGCTGCACTCATTCCAGGAAGCGCT  
CTGTATTCTGTGCTGACCGCTGGAGGGGTGGCACTTGGAGCAGCATCAGGCGTTGCCGCG  
TTACGCCATCGCGGAGGGCTTCGCATTTTCAATGGCTGTCTGCGCTTGGTGGAATCGTC  
ATTTTGCTGATCGGTATCGTAGTGGCAGTTGCAAAGTTTGGGGCCTCGGCAAACTTGCC  
ACGTTAGGCCTGGTGACCTCGTATTATCTCATGCCGTCTGCGGCATTGGCCTGTTATATC  
GGAGGGCTTGGCCAGCTACCAGCCAAATGGATTGCGCCAGCGTTTATGGCTACGGCTGGT  
GCAGGTGCTGCGGGATGGTTTTCATTGGGGGCAGGCACCGGTTTGAACGGTTCCCTCATT  
GCTGTTGCAGCGGTGTTTTCAGTATGGGATGTGTATACCCAGTGTGGGGATGCGTCGTA  
AAGCGTCCACGTCAAGTGGCTGCATGGCTGGTTCGCGCTGGCGGCCCTGGTGCCTGGGGCG  
CTCATGCTTTTTATGGTGAAGCATGGTGGTGGCGCCGGGTTTGCTGTGGCTGCAGCCCACG  
ACGGTCGCATGGGGTTTATGATTGCCGGGGTTCTTGCGACGGTCGCAGGCTTGTGGCCT  
AGGCGTTTT

>RXA01610-downstream  
TAGACGGAATCGTCTGGGAGGGT

>RXA01611-upstream  
CCCCTTACAACCTACTTGGTTTACACCGGTGTTATCAAGGGCTAAATCGCCTAACCTCTA  
TCTTCATCTATAGCTTAGCTTTACTGAAAGGCTTTTCATC

>RXA01611  
ATGCGTAAATTCGCAACACTGCAATTGCACTAGTTTCTGCAGCTGCAATCACCTTGGGT  
GGCGTTACCGCTGCTACCGCTCAGGAAGACGAAACTCCTCCTGCAGCAGAGACCGAGACC  
ACTTCTCCTTCCGGTTCCCTCAGGCTCTTCTGGAACGACTACAACGAAGGTACGAAGGC  
GACCAAGAGGGCTACGGAATCGACGGCTTTGGTTCTTCCCGCGATGACTCCGGAGAAGAA  
GTTCCACGTTGGTTGGAGACCTGGGGCAAGGTATTTGACGCTTTGACCATTACCTCCGTT  
CTTGGTCTTGTTGCTTCCCTGTTGTTAACTTCTGAAGTACAACGGCCTCATTAAG

>RXA01611-downstream  
TAATCTGCAATTTCCTGTCAAAT

>RXA01612-upstream  
GAAAAACGACGTTGGTTCGTAGTCGCTGGAAATTTAATAATTCCCTCCGTCCCCTTCAAC  
TAGGGGGTGGAACCCGACTATTTCCGAAGGACTATTCTC

>RXA01612  
ATGCGTTCTTTCCGTACCGCGGCAGTTGCAGGCCCTTACTGCAGTTGCACTTTCCGTAGGT  
TCCGCCACCGTGGCAACTGCGGAAGAATCTGATCAAAACCTCTCATCCGGCTTCTCAGCA  
CTTTCTTCCGGTGGCGCAGCGGCCGTAGGTGAGGACTGGGATGCAGACCAGCCCGTCACA  
GGTGAAGACATCTTTGGTGAAGAGCACGAGCGGATAACGAAAACACCCAGCGTGGGCT  
AAGAACATGTACGATCTAACCGTCTTGGGTGGCATTGCTTCCCTTCTCGGTGTCATCGTA  
TTCCCCGCTTACAACCTACTTGGTTTACACCGGTGTTATCAAGGGC

>RXA01612-downstream  
TAAATCGCCTAACCTCTATCTTC

>RXA01618-upstream  
GGCCGTGCGCGCCTCCAGCGAGCCTGGCCGTGCCGAAAAGTGCTCATTTCGTTTCTAAAC  
GTTTAAGGCCCATTAGACCCCTGATTTAAAAGGATCTCAC

>RXA01618  
ATGATCATTATCGGAGCAGTTTTCGCCATCCTCGCAGTTCTACTGCATGTTTTTCATCTTC  
TACATGGAATCATTTCGATGGACTAGTGAGAAAGCACGTGGAGTTTTCGGCACCAACCGAA  
ATCGACGCCGAAAACACCAAGGAGATGGCCTACAACCAAGGCTTCTACAACCTTCTTCCTG  
GCAGTCATCGCCGGCGTGGGTGTTGCGTTCCCTTTCGCTGGTTCAACTGGCATCGGCCGA  
GCCCTCGCACTCGCTGGCACCGGTTCCATGCTGGCAGCCGCTGCAGTGTTGGCTTTGAGC  
TCACCCGACAAGCGTGGTGCAGCCTTCAAGCAAGGCACGTTCCTCGCTGCTCGCAGTGGT

TTCTTGTGATTGGATTGCTGGTT

>RXA01618-downstream  
TAAGCAGTTTTTTAAAGGAACCTT

>RXA01619-upstream  
CCTGCAAGTTTACTGCTCGGCCGTACGGGGGAATGGAAAAAGTACGCTTGGTGTTCATA  
TAGCGAACCCATTTTCTATTGCGATGAGAGGAACACCACC

>RXA01619  
ATGCGCGCAATCACTCACAACTTTTCGGCGACCCCGCCGACGTCCTACAGATTACCGAG  
AAGGAAAATTCCCACCTCCCGGCCAGGTTCAGGTTTCGTATTCAAGTGACGCTGGCAACCATC  
CACAAACCATGATTTGTGGACCGTGAAGGGCTCTTACGGCTTCGTCCCAGATCTGCCGGCC  
GCCGACGGCACCAGGAGGTGCGGCATCGTCGACGCCCTGGGCGAGGGCGTCGAAGGTTTG  
CAGGTCGGTCAGCGTGTTCGCTCCGGCACCAGCTTTGGCATCTGGGCGGAGTACGCGCTT  
GTCGACGCCCTCCGGCCTCATTTCCCGTACCAGAACAGCTCTCCGACGAAAGCGCAGCTCAG  
CTCGTCGCAATGCCCTTTCAGCGCCATCAGCCTTCTTGATTTCTTGGATATGAAACCAGGG  
GAGTGGCTGATCCAAAACCTCCGCAACCGGTGCCGTCCGGCCGATGCTCGCACAGCTGGCA  
GAATCCCGCGGCATCCATGTCTGTTGGTCTCGTCCGCCGTGACGCCGGTGTCCAAGAACTC  
GCTGCTCAAAACATCAGCGGCGTCTGTTTCCACTGAGACCCCAAGGCTGGGAAAAGCAGGTC  
GAAGACATCACCGGTGGCGCAAGCATCGCCGTGCGACTTGATTCCGTCCGTGGATCCTCC  
GCAGCTGACCTGGTGAAACTGCTTGGCGAAGGCGGCACCCTCGTCTCCTTCGGCGCCATG  
GGCAACCCAATCATGGAATCCCATCCGGCCCCGTCATCTTCAAGCACATCACCGTCAAG  
GGCTTCTGGGGAAGCAAAGTCAGCCGCGAAATGCCAGCAGAGAAGAAAACCCAGTTGTTT  
GGCGAGCTCATTTGCGCGCATACTTGATGGAACATTGACCCCTCCAGTTGATTCCACCTTT  
GATGCCGCTGACATCGTCTCGGCCGTGCGCGCCTCCAGCGAGCCTGGCCGTGCCGAAAA  
GTGCTCATTCGTTTC

>RXA01619-downstream  
TAAACGTTTAAGGCCATTAGAC

>RXA01622-upstream  
AAGGCGTGGGCGTTTTTGAAGGAGCTTCGTTTGGAGCGCGGTCCTTTGGATCGTGAAGTT  
GCCATCGCAGAGCTGAAGAGCTGGTGGGAAGGAGAAAAACA

>RXA01622  
ATGAGTGATTTTTATGCCGACAGGTTGTTTAAACGCGATGGAGCGCAATGAGGTAGCTCCA  
GGCATGTTGTTGGTGGCTGCGCCCGATATGGCGTCGGAGGATTTTGAGCGCAGCATCGTG  
TTGATCATCGAGCATCTCTCTGCCACCACTTTTGGTGTGAACATTTCTTCACGTTCCGAT  
GTTGCTGTGGCCAATGTGTTGCCCCGAGTGGGTGGACCTCACCTCGAAGCCACAGGCACTG  
TACATCGGTGGGCGGTTGAGCCAGCAGGCTGTGGTTGGTTTGGGCGTGACCAAGCCGGGC  
GTGGATATTGAAAATTCCACCAGCTTCAACAAGCTCGCCAACCGCCTGGTGACGTGGAT  
CTGCGTTCTGCACCTGAAGATGTGGCTGATGATCTTGAGGGCATGCGCTTTTGTGCGGC  
TACGCGGAGTGGGCTCCGGGCCAGCTCAACGAGGAAATTGAGCAGGGTGATTGGTTTCGTC  
ACACCTGCGTTGCCGTGCGACATTATCGCGCCGGGCGCGTCGATATTTGGGGCGACGTG  
ATGCGTCGACAAGCAATGCCTTTGCCGTTGTATTCCACGTTTCCGTCCGACCCCTCAGAT  
AAT

>RXA01622-downstream  
TAGATGAGTTCCGAAAATTTAAA

>RXA01623-upstream  
CGCGCCGGGCGCGTCGATATTTGGGGCGACGTGATGCGTCGACAAGCAATGCCCTTTGCC  
GTTGTATTCCACGTTTCCGTCCGACCCCTCAGATAATTAG

>RXA01623  
ATGAGTTCCGAAAATTTAAAAGAAATTCGCGGCGGAATCGGTGAGACTTTAACGGTCGGT  
TTGGGGCTGATTCCGCTGGGTTTGGCCTTTGGGCTGTTGATGGTCCAGACAGGTTTCGCC

TGGTGGTGGACGCCGATTTTCTCCTTCGTGATCTATGCCGGTTCGATGGAATTTCTGGCA  
ATCGGCATGGTCACCGCAGGTATCGGCCCGTTTTCGGCGGCGGTTCGCTGGTTTCATGGTG  
AATTTCCGCCACATTTTCTACGGTCTCACCTTCCACGCCACCGCATCAAGTCCGGCGCC  
GGCCGCGCCTATTCCACCTACGCGCTTACCGACGAGTCCACGCCATCGTGTGAGCCCGC  
CCACCTGGCGATATCAGTGGCACGCGGGTGCTTACCGTTCAAATTTTGTGCCAAGCTCTG  
TGGGTTATCCCAGGAATTATTGGCGCCTTGGTTGGTCAAGTGCTGCCCCGATGATCTAAAA  
GGCATGGATTTTGCCCTGACCGCGCTGTTTGTGGTGCTGGCGTGGGAGGCATTCAAAAAT  
AACAAGGATTATTCGCTGCCATTATTCGCGGTGGTATTGGCTCTGGTTTCCGGTTTTGTG  
GCGCCCGAGCAGATGCTGGTTATCGCTTTGACCACGTACTTTTGTATCCTTCTCTCCGC  
GTCCGCTTCCCCAACCTGGACAAGAACTGGAGATCAGGACTTCCCATGAG

>RXA01623-downstream  
TGAGTTTGGCCTGCCAGAAGGCG

>RXA01624-upstream  
GAGCAGATGCTGGTTATCGCTTTGACCACGTACTTTTGTATCCTTCTCTCCGCGTCCGC  
TTCCCCAACCTGGACAAGAACTGGAGATCAGGACTTCCC

>RXA01624  
ATGAGTGAGTTTGGCCTGCCAGAAGGCGTCACGCTGCTCAACGTCGCCGCCGTGTTGATC  
CCCATCGCGATCATCACCTTGCTGCTGCGCATCTTCCCTTCGCCCGCATGAAACGCGTC  
AACAGCAACCAACTCATGGGAGTTTGGGGCGCACAATGCCAGTCGGAGTGATGGTCGTA  
TTGGTCATTTACACGCTCTTTGGCCAGGTGAGTGCAGCCAGGTGGTGTTGGGTGCTTCACTG  
ATCGCGGTGGCATTCACCGCGCTGCTGCACTGGTTGAAAGGCTCCGCCGGGCTGTCCATC  
GTCCGTGGCACCTTGGCCTACATGTTTCTGGTCAACGTCGTTTTT

>RXA01624-downstream  
TAAAAGATGCTTCTCGACGCAA

>RXA01627  
CGCACCTATTCACCATCCCTGAAGGATTACAACCTCTGATGAACCCCTCACTGTTGGGGCCT  
GCAGAAGACCCCAACATGTATCAAGAATTCGAAGTGCTTACGAGCAGCTCGGCATCAAA  
CCAGAGGGCCGCACCCTGATCGGCGATTCTTCAGCGCCGATTTCTTGACCTCCAATGAA  
ATTGGAATAGTTGATGAGGTTCTTCTGGAACGATCGCTTTCACGAACCTGGAAGGACGTA  
ACCGAAGGTCGCCACAGTTGGTATGTTTCGCTCCGAGGATCCTTTCGGCGGCGTCGAGATT  
TCACCCGTGCAGTCTTTCATTGCCGGGGAAGAGGCTGGCGGGAACGCGCCCGGCACTGGA  
AGCTCCAATGGCGGTTTCATCCACGGATTATGGGGTGCGCTTGCGGAATTCTTTGCCGGA  
GCGGCAGCCCTGGCTGGAGCTGCGATCGCATTTGTCCCCGGAATTTGGGACTATGTGACC  
AACGCATTCAAGCGA

>RXA01627-downstream  
TAATTATGGATAGGTAAACGCTC

>RXA01628-upstream  
CTTCCCTTTTCAGCCCGTTGAAGAACCAATGAGCCCTGCCCGCACCCAGCCCCGAGCGGC  
TTTCCTAAGGAAGCTCCGACCCATCACATGTAGCCTTTCC

>RXA01628  
TTGGTTCTCGTAGGGTGCAGCAACACGGCAGAGTCCACGACCACCGATACGGCAGGCTCC  
ACTGAAACTTCATCACAGATTTACCCACCCTCCAGTCAGCACCACCGAAGCAGCGCCG  
CCTGAAGATCCAAGCGAAACGCTTTGGAAGAGTATGCTCAGATCCTTGCCAATCCAAGC  
ATCTACCCCTTAACCGAAATTTACAATTCGTCCCCACAGGCACATATGCCTACACACTT  
GTTGAAGCAACTTCCGATTCCATCCCAGAACTACTACTCCGCGCCGATAGTCACGAATTC  
GCGCCAATTTTGGTTTTCACCTATGACGAAAACACACAATCCGCAACCCAAGCTGGAGGA  
GTCCTAATTGACGGTGTGCGCAGCGCCGGCGGTTTCACGAGTCAAGGTCAGAGCTTCAAAT  
TCAGGAGCAGGAATCTACCAATTGAATTGGTACTCGATACAACCAGTTGGCGAAAGCTCT  
TTGTACGGAATCCAAGGAACTCCCTGACACAAATCGCAGACCCCGAGGATTTTCATGGTC  
CGTGAATATTACCTGACCACCACGAAATTACCTGGGTTGATTCCAACGACCCCTCCGGC



CTATCAACCGTTTCAGACTGGTGGAGCCAACATTCAACAAGCAGCCCCAACTCCCGTTCAA  
CAGCCTGCGTCAAACCTGCACTACTTCTCTGGTGTAGTAACGATGCAGACCGCCGGCGAA  
CTCATGCGAGGTGAACGAACCTCCCAATGGTGAGCCTGCCACTGATCTCTATCTCGTACTG  
GTCTTTGATTCCCCAATTGAAATCACAGCACGAAACGCAGCTACAGACCCCTCAGACTCGT  
ACCATTTCCGAAGTCAGCCTCGGCCGATACATCCCCGCTGATGGTGACAATGATTGGATA  
GGCTACCTCGACACCCACGTGGAAATCACTGCAACAACGGATCAGGTCTGGTTCCCAACC  
GACACCGGTCTACCTCTTGGAATGCTTCGTCTAGCGGACTACAAAAGCATCTCA

>RXA01628-downstream  
TAAACCGACGCAGCACTCGTCTGA

>RXA01630-upstream  
GTAGGTGAGTCTTCGTGAGATACCCCCGGCCAGTCATACAGTTCAACCAAGCTCCACCAC  
CCAGATAAAAAACCTGCGGGTTGCGTTTTAGGAGAATTCCC

>RXA01630  
ATGAGTGATCAAAAAATTGTTGTTGGCCTGCTAGGCATCACCCACCCGCATGCGTCCGGCG  
CGGGTGCGTGCCCTCCGTGAAATTGATGGGGTAGAGGTCGTGCGCCGCCGCGGATACTGAT  
TCCCGCCTCCAGTACTTCACCGACAAATATGATGTTGAACCCCGGAGATCGATGACGTC  
TTGAACGACGATCGCATCAACGCCATCATGGTTCACTCCAAGAGCAAGGACATGGTCCCT  
CACGCCAAGCGCGCGCTCGCGGCCGGAATAATCCGTGCTGCTGGAGAAGCCCGGCCGGGGGA  
ACAGTGGCGGATCTTGAGGAGCTCCTGGCCCTCAAAGAAGCTGCCGATCCTCAGCGAATC  
GTGCAGGTGCGGTACAACGTCCGCCTGTCTGAATCGGTTCAAGATTAAGAGCTTCTC  
GACGCCGGCCTCATCGGCGAAGTCGTACGCGTGCAAGCACGCGGCCGCAAAAGTAGGT  
GAGCATATCACCGAGCACCTCAACCAACCCGACAGATGGGCGGTGTGTTGTGGATTCTT  
GGCTGCCACATGCTCGATGCATTGGTGGAAGTCTTCGGAGCTCCAGAATCCGTGAACGCC  
CGAGTGACATAAGACCGCAAACTCTCTGACGACACCAGCCGCGAAGACTCAGCCTCCGCA  
CTGCTGTACTACCCAGATTCTCCGTGAGCTTCAGCTTCGACGGCCACGATGATCTGGAA  
TGGTTTCGAAAGCTCCCGACTCACGGTCTATGGAACCAAGGGCATGATCGAAGCCGGAATC  
CTCCCTCAGACACTGCGCGTATACCTCAATGAGTCACGCCAGGGCTGGCCACAGGGTTGG  
ACCGAGTGGACCCAGAGCTACTTCACCCACCGTTTGTCTCGCACAGAATCCAACAAATTC  
TCAGAGCTTCAGAGCTAGAAAACATCAGCAACTTCGCGACAGAAATGCAGGGGTGGGTG  
AATTCATTCGCACTGGATCCCGCAATGTGGCGCCAGTTGAGGATGCTCTCACAGTCGCT  
CGCATTTGTCAGTGCATGCTACGAATCCGACAACAACAGGGCATTTCCGTAAACATC

>RXA01630-downstream  
TAAGAGGAGCACTCCATGAAACC

>RXA01634-upstream  
ATTGGATCTAGGAAAAATTATGAACATCTCAAAGCTCGGACTGAGGATCGCGGTCACAGC  
AACGGCGACCACAACGGCGCTTGCCCTCGGTGGCACGCAC

>RXA01634  
ATGGCAGTTGGTCAAGAACTGATCTGCTCAACGCTATGGAAACACTCGCTGGGGTTCCC  
TCAGACTTGGTGGTCACTGAAATCCTCCCCGATACCACCAGCTATGACAATTTTGAATTC  
TTTGAAGTTCAACAACCCGGCAGTGACCCCGTGACCATTGGGGAAGGGGAGTACACCTTC  
GCCTATTCCTTTGACGATTCCGCCGATACGTCCCGCGACAAGGCACTGGATCTTGGCGGG  
GAAGTCACGGTAGATGCAGGCGAAACCATTTGTGGTGTGGATTGAGTACTCCAGTTCAACT  
GTTGATACCGCTGCGTTTAGTGAGCAAGACTTCCGTGATTTCTACGGCATGGATTCTCTCA  
GCCCCGATCTTCCGAGCAACTGGCCAGGCGGGTCTCGCTAACGGTGGTGATCGTGGCATC  
CGAGTTCTGTACAATGGTGAAGTTTCTGGTTGGTCCCCTACCCATCAGATAGCGCAGCG  
GTTCAAAAGGGAATTGACTTCGCGCTGCCAAAAGTAGGGGAGCAGGCCAGCATTTGCAAGT  
GCGCACCAAAAC

>RXA01634-downstream  
TGATCCAACCTCCAGGATCAATTA

>RXA01635-upstream

AGGGAATTGACTTCGCGCTGCCAAAAGTAGGGGAGCAGGCCAGCATTGCAAGTGCGCACC  
AAAACCTGATCCAACCTCCAGGATCAATTACTTCTGATCAAG

>RXA01635

TTGATTCTTGGCGGATTGGACACTCCAGAAGAGCCTGAAGCCCCCTGAAGACTCTCTTTTT  
GAAGGGCGCACTCCCCCTAGGGATGCAAGCACCCGCTTGATCCTCACTGAACCTAATGGTC  
AACTCCACCAACATGGGCAGTTCTGATGGTTTTGAGTATGTGGAAATCACCAACACTACT  
GCCGAACCCATCGATTTTCCGATTACACCTTGAACCTGTACCCGCAGGATGAGTTC  
ACCAACACCAACGAAGCCGCTCTGGGCTGCGGAACCTGGTGATGTCTATTATTCAGCCTGGA  
AAATCTCTCGTGTTTTGGATCAAAAATGGCCCCAATGATGAGGCAACCGCAGCAGATTTC  
AATGCCAGAAATGGCACCAACCTGGAGGCTGGAAAAGACCTTGTTGAAATCTCCTCAGGT  
GGGATGGCCAATGGTACTGCGCAGAGGAATGCAGATTTCAGACCAACACTGGCCACATAGTC  
AACCGTGGTTTTCTACAACATGGCTGGCGCTTCTGATGTGAAAGCCAACGAGGGTCTTCAT  
TTCGAGTGATGAGTCTGATCTTCTGAAGCAAACGCTTGTCGGCAGCGGTGCGCCAACC  
CCGGGCACTGTGTACACTTCGCAGATTCTTAATCCACTGTCTGCCGTTATCGCTGATTCT  
TCTGTACCACTCATCACAGATAATACCGCAACCAGTATCAACCTTGCGGAGCCGTTTACC  
TTCGCTTCAAATATCACCGA

>RXA01635-downstream

TGATGTCCAGGTGCGCACGGCAA

>RXA01636-upstream

GCTGATTCTTCTGTACCACTCATCACAGATAATACCGCAACCAGTATCAACCTTGCGGAG  
CCGTTTACCTTCGCCTTCAAATATCACCGATGATGTCCAG

>RXA01636

GTGCGCACGGCAACACTGCATGTTACTTCCAGTGCTGGCGAAGCCGCGACAACCATCAAC  
CTCACCGAGGATGACGGCTCTTTCAATTGGGCTCTGCCTGCAGCGGATCTCACCGGAAAA  
TCCTGGTTTGAATACACCGTAACCGCCACCGACGGATTCAACAGCGTTACCACCGAGCCG  
GTACGCGTCACCGTCGACGGCGCCAACACCGACCCGCTGCGCCTCAACCTGGAAGAAAAC  
CAATGGGTCAGTGGCACCACCGATGTTATCGGTGCTTCAGATGTCTTCGGCGACAAGCTT  
GAATTGCTTATCGACGACGCGCCTGCAGTCACCAACTCCAGCCTGTCTGCGGCCCCGACG  
TTTGCGATGGAAGTAACCCAAACTGATGTGTTCTTCCGCAACGGCATCCTTGCCGGTGGG  
GAAGAACTCCGCATTTTCGATCAAGGAACCTACGCCAACACCGAAACCATCTCCACACCA  
GTCCCCGTGTATCACATCAATGAGGACGGTACCCTCACAGTCAGTGTGTATGCGGGAACT  
AAAGCAGCACCGAAATTGACCTCAACGAGAAC

>RXA01638-upstream

TTTCACTGGGCGAGTGGACTCACGGCCGGTAGATAAGGTGGCGGAGATTTCAACGCAGGG  
GGAGACGTCGATAAGCAATCAACCCCAACCCCAAGCCACC

>RXA01638

GTGCTCGTGACCGAGGACCTGCTTATTGAGGCGCCATTTGGTTTTGAAATGCGAAGCGAC  
GAACAGTCGCGCTACCTGGAAGGCCCCGACCCGAATCTGCGCATCCACGTGGGCGTCGAT  
CCGCTGCACGGCGCGGACGCCGCGCTGGTTGCCGAAGAGCTGCGCCGCTGATCACCGAG  
GATCCTTCGCTGGAGGAAATTCCCGCAGGGGAGTGGGGCGAGAAAACCAACATCGACTAC  
CGCGAAACACCCGGCGATGGCTCTCATGTGCTGTGGGTGACCTGGTTTGACACCGACCGA  
CAACTCAACGTTGGGTGCCATAGCAAAGCCGCCGAAACCTTGTTTACAAGGCACAATGC  
CGAAATGTGATTGAGCATCTGACGCTGAAA

>RXA01638-downstream

TGATGCCGGTTTCTATCCGGAAT

>RXA01639-upstream

AGGCATCAAACCCACAGCACAAACCACAGGACGTGCCACGATGTCCATCCGTGGTGAAAA  
CATCGGTGTTGCACAGATGGCACCGCATAGGTGATGACTC

>RXA01639

ATGAGCACCCAAACAATCACCATCACAGTCCTAGAAAACCGCCACCATCTTTGACGGCCCT  
GAAACCATCTACCGCTATGACCTGGCTGCCGAAGGCATCCTTGATGGATGGGCTCACTCT  
GCTGTGCTGGATCAAGTGAAACAAATAGCAGGTGAAAACCTGGCCGACTGTTGAGATCGTG  
GTGGATGGCACCGACAACGTAGTCAATGCACCTCACCTCCATGTTTGCTTCCAAAGGCGTG  
ACCTGCGGTGGGGTTGGAGTAGAAGCACCTCCCGTTGCGGAGGAACCACCGAAAAATTAA  
CGGCCACGAGTGGAACAAAGTCCGCCAGTTCTACGGCATCAAGCCACTACACCTGTTG  
TTGGTCAGCATATTGGTTGGTTCTATTGCTGGTATTTGGGGATTTCGGGTTCACTGGGC  
CAGTGGACTCACGGCCGG

>RXA01639-downstream  
TAGATAAGGTGGCGGAGATTCA

>RXA01641-upstream  
GTGAAATTAGGGGAATTCTCACCAACGCTGCTCCCCGTCCCCCTTTTGCTGGCATACTCAA  
AGACACATTTGTTGGGGGACAATTTTGGGGGTTGGTTATT

>RXA01641  
TTGGCAATCGATAATGCGCTGCGCGTGAGCATCCGCATAGATCTCACCGTTGGCGATGCG  
CCCGCTGCTGTGGCTGATGTGGCGCTACCTGCAGGTTTCAGTCTGGCGGACATTTTGAT  
GAAATTTTAGAACTACCGATGCACCCCGGATTTCCAGGCCGTGGGTGGCTCACACTGCT  
GCGGAAGTCCCATTTGATTGCGGGATTCCGCTTGCAAGAACACAAGTGGAACAAGGCAGC  
GTGGTGGTCTTTTACCCGAAAGGGACTTGGAAGCCCCGTGTTGCGTGATGTCGCCGAA  
GCGTTGGTGGAGTTTCTTCCACGAACCGCGCCGGGCACCTCGTGGAATTGATGACTTTC  
GCGGGGCTCATCGGGGCTGCCGTGTTAATGACAAGTCCTGCTGCCTCCGGAATTATTGTG  
CCCGGCCGCATGGGAATCTTCGTCGCAATCTGCGCTCTACTGCTTCTGTGGCTCCACCC  
GCGCACACCCCGATCCTTCGAAACGTCCTGCCGATTACCCTGATCTTGGGCGCAGGCGGA  
GCGGTATCAGTGTGGTTGCAGGCACCTTCTGGGACTTCTCCCGCGCGCTTACCTGGACG  
ATTTTCGCTGGCGCGTGCACTATTCTTGCCAGTTCGCTGCTGGTTTCATGTGGTGTATCGT  
CCAGCAATTCTTCTGGTGGCAACACTGTCCACATTGGGGCTCGGTCTCTTAGTCTTGTGA  
GCAACCACCACTCTGTGGAAGCTCAAAGCTACCGAAGATTTACGCGGTCCAGCAGCGATC  
ACGGTCACCGCTTCCACCATCACCATGTGCTTCGCCCCGAAAATCGCAGCATCGCTAGCA  
GGCCTGCGCGTCCCATCGCTTCCCACCGCCGGCGAAGATCTCTCCGTCAGCGACCTCACC  
ATGACTGATCCCGAGAAAAGAATAAAAAACAACAAAGACGCTTTTCGACGCCCAGATCCTT  
GGCCTTGGCGTTTTTGAGCGGGCCTTTGGCGTTGTTGTGCGGTTACCCCGGGCACCTGGACA  
ACCACCGTTTTTAGTTTATGCATCGCGGTGGCTTCGCTGCTTACGCTAATCGTCATCAA  
GCACCAATTTCCACGTGGGAGTATGATGGGGTTATCTGCCCTTGGTTTCATTTCCATGGCG  
TTATCCGCAAGCCGATCAGGTTCACTAATTGCACTGATCGGTTCTGTGGTTATCATCGCT  
GTGCTGGTCAGCGTGGCATTTGTGGATCAGTACAGTCCCCACGCTGGAACCCACCACCAT  
GTGTGGCTTGAAAGGTTGGAATCACTGTGTCTTGACGCTAGTCTGCCACTCGCACTGCAT  
TTGCTGGATGTATTGGAATGCTGCGCGGTCTTGATATTGGATTCCGGTGGA

>RXA01641-downstream  
TAAGATGCGCAGACTCATCGCGG

>RXA01642-upstream  
TTGGAATCACTGTGTCTTGACAGCTAGTCTGCCACTCGCACTGCATTTGCTGGATGTATTT  
GGAATGCTGCGCGTCTTGATATTGGATTCCGGTGATAAG

>RXA01642  
ATGCGCAGACTCATCGCGGTTAGCTTGCGCGCTCTGTTTATGTTGGCTTCCACTCCAGCG  
ACGAGGGCACAGGAAGTAGAAGCTCTCGCTTGCCCCGAGGTAGCGATCGCCGATCCTTCC  
TCCGCAGTTTATGATGAACACCTTTCGCAGTCATTATCCCAAGCTCACCAACTAGCACT  
GGCCCGGTGTGATGGTGGCAGTCATCGACACCGGAGTATCCCTGCATCCACGTCTGCCC  
CACTTAATTCCCGGCGGTGATTTCTGTTGGCGCCCCACCAAAGCCCCGATGTGCCAGGTGAA  
CTTATCGATTGCGACGGCCACGGCACCATCGTCGCCGGAATCATCGCCTCCCAAGGAAAC  
CCCCGACCGGCTGGCCATATGACGGCAGCTCCGATCCTTATATCGGTGTGCCCCAGAT  
TCCGGAATCATCTCCATTAAACAACAGCTCATATGTGCGTACTCGTGAAGATTCCAAC  
GTCCGAACGCTGAGCACCTGGCGGAATCCATCCACCGAGCTCTCGATTCCGGTGCCCCAC

GTGATCAATATTTCCGTGGTGTCTGTTTGCCCCAATCACCCGACGAGGCCGCATCGTTC  
CAGCCTCTGACGGATGCTCTTAACAGAGCAGAACTTCAAGGGGTGATAGTGGTGGCAGCA  
GCAGGAAACCTCGGGCAGGATTGTCCAGTTGGATCTACCGTTTATCCTGCACATTTCAGAC  
ACTGTGCTCTCTGTGTCGGCAGGTTTTGATTCTCACACGCTTGCAGAATATTCCATGCCT  
GGCAACCAACAAATCCTCTCTGCACCAAGCCACATTCAGGCTGGTCTATCACCGCGTGGC  
GACGGCTTCGCCAGCCACATGATCACCAACCGCTGGCGAAAGCCCCCTCGAGGGCACCAGT  
TTTGCCGCTCCAGTTGTGACGCGCCACAGCTGCACTGCTTCGCCAGCATTTTCCCTTTGCC  
ACACCCATATGAAATTCGTGCACGAATCTTCAACAGCATCGACCCCTGCAAGAGGCGCTATT  
GATCCCTACCTGGCACTTACTCAAGAAATCTATCCCACCCTCCCTGGTTCATGAGATC  
GCACTAAGTGTTCACCGCCGCGGATGATTCTCCACGGGAGCGGGGCATCCTAGTTACC  
GCAATCATTTGTTGGGTTGCTCGCAGTGTAGCTGTGCTGATGGGACTACGCCGAATTCAT  
CATCACTCGGCCCTTTCAAAAAGCTAGCTCAAGTGTATCACT

>RXA01642-downstream  
TAATCTATGAGGCACCGTTCAGA

>RXA01643-upstream  
CGGATTTCAACACTTTTCAGGATGCATCTGTAACTATGCCCATGCCACACCCCATGTTTAT  
CGATGTCTCCTTCCACCCGCGGAGACCTGTAGTTAACCC

>RXA01643  
ATGGGCACGATGCGAGAAATGGTCACTGACCGCATTGACCGACTACAAGAAGCACACGCG  
CGATCAAAGCAGAAGAAGTTCGGCTTCTTAGTTTCGGCCAGGCACCCCTGATCCTTGGATGG  
TTGGTCAAGATCATCGGTCTGATCACCATTCCACTTCCCGGCCAAGGCTGGCTGACCACC  
TTCATTGGTGTGGGCATTTTGTCTCTGGAGCTTAAATGGGCGAAGAACCCTCCTGGCCTGG  
GGAGTGCATCAGTATGATCGCTTCTTCACTGGTACGGCAAGAAATCATTCGCTTCCGC  
ATGGCGATGTTGGCACTGATGATTCTGCTGATTTGGGTGGTGTTCATCGTGACATTTTGG  
TTGATGTGGCACGCCGGAATATCCCGTGGGCAGATGAGTTCTTCACTGGCTTGGGTTG  
AGCCGC

>RXA01643-downstream  
TAGCAACTATTCGCTTTGAAGGC

>RXA01645-upstream  
AGAGGGCATCACCTATGACCGCCTGACAATCCGCGATTACATCTGGCGCTGGGACACCGA  
CTGGTTCTGGTGTTCACGCGCATTCGGCACCCAAAACCC

>RXA01645  
GTGGTGCAGAACTCTGGCCAGGGATCTGCTGCGCTCGAGTTTCTATTGGAAGATCATC  
GGCTGGGATCGAAAATACTCCATCGCTGATCGCCTGGAAGAGCGCAAAGGCCGCCCCGGCT  
AGGGAACGGGTGGTCCAAGACGTGGAAGTTACGATTGATAAACTGCCAGAATTTTGA  
TGTTCTTTGAAAGCAGCGACATCGAGCCGCTGTGGCTGTGCCCGATCAAGCTTCGGGAG  
GTACCAGGTAGTTCCGTTGGTGTGAGAGAAATTTTGAAGCTCCGCTGAAGCAATCGACTCC  
GGTGTGCTGAACACCCCTTGGCCGCTGTATCCCTTGAAGAAGGACGTGTGTGGGTCAAC  
ATCGGATTCCTGGTCTCAGTGCCGGTTGATCTGATGGGCTCCGATGCACCAGAGGGAGCA  
TTTAACAGAGAAATCGAACGCGTCATGGCAGAGCTAGGCGGACATAAATCGCTGTACTCC  
GAAGCGTTCTACACCAGGGAAGACTTTGAAAAACTTTATGGCGGAACCATCCCGGCGCTG  
CTAAAAAAGCAGTGGGATCCCCACAGCCGATTCCCCGGTTTGTATGAAAAGACAGTAAAA  
GGCGCC

>RXA01645-downstream  
TAGGATCGCTCACTGTAGGTAGA

>RXA01646-upstream  
GGTCGTGCCGTGGAGCGTGTGCGATTGTTGCCCGAGGGAAGTGAATTAGCAAAAGAGAC  
AGCGCTCGCGCCACCTATTAAGGAGTATGGTGGCCTTAC

>RXA01646  
ATGAGCGGATTAGTTGACCCGGATAGTACTTTTTTAAAGACCATCGGAAAACCTGAGCAAC

AGCTTGTCCATTGGTCGTGGAGTAGATCAAAAAGAGGTAATCCCCAAAGGCTGGAACGCC  
 CATTGGGAGGCAATTACAAAGCTTAAGAGAAGCTTTGACGCGATTCCCTGCTGGGGAGCGG  
 GTGCGTTTAGCTAAGAAAACCTCCAACCTGTTCCGTGGACGCTCCGATGCAGGTCACGGC  
 CTAGATGTGGCAGCGCTTGGGGGAGTGATTGCCATTGATCCGGTCAATGCCACCGCCGAT  
 GTACAGGGCATGTGCACGTATGAAGACCTGGTAGATGCCACTTTAAGTTATGGTCTGATG  
 CCGTTGGTTGTGCCTCAACTGAAAACCATCACGCTTGGTGGCGCAGTGACCGGAATGGGC  
 GTGGAATCCACATCCTTCCGCAACGGTTTGCCACACGAATCAGTGCTGGAGATGGATATT  
 TTTACCGGCACTGGTGAGATCGTGACTTGCTCGCCACAGAAAATGTCGACCTTTACAGA  
 GGTTTTCCCAACTCTTATGGTTTCGCTGGGATACGCGGTGCGGCTAAAAATTGAGCTGGAA  
 CCAGTGCAAGATTACGTCCAGCTGCGCCACGTGCGCTTCAACGATTTAGAGTCTTTGACC  
 AAAGCGATTGAGGAAGTCGCGTCTTCTCTGGAGTTTGATAACCAACCCGTCGATTACCTT  
 GACGGCGTGGTGTTCACCCACGGAAGCCTACTTAGTTCTTGCGACGCAACCTCACAA  
 CCTGGCCCCACCAGCGATTACACCAGGGATTTAAGCTAC

>RXA01646-downstream  
 TAACGCTCCCTGCAACACCCAGA

>RXA01647  
 ATGCCGCGCGGAGTGCCGGTGGGGGTTCTGATGCGCCGGGGCTTTTCAGCAGCACCGAA  
 GAACCCGAGCAAGATTGGTTTGTGTGCCAGGATGTCGCGCACTGGGGATCTACACATTACG  
 GTTCTTAGGGGGCAGCTAGGGCCACCCTGATTGCGGAAGGAAATGGGTGGCTGGGGGCG  
 TCGAAAAGCGAAACCGCGGAGGTCACCTGGAACCTGATTACCGCGGACGGGCGCCGCGAA  
 CTGCCGGCGTGGGGCAGCGAACATGGGCGCATTATGCGCCGCCACCTGGGGATTTCGAG  
 GACACCCCGCGGTATACCTGACCACTGAGCTGCTCAACGCGATCCCCGAGCACGACGCG  
 GTCCGCTTCCCAGCCCCGCTGCCGAGCTTGTCGACGCTCCACCCGCAACTGGTTACGG  
 CTCGACGGGGCGCTCGCCGAAATCACGCCGCTACAGCGCGGGTTGCTTATCGACGCCGGT  
 TCCGGTGTTCCTCCCGACCCACCGCGCTTCTTGGTGTGCATGAAGAAACAGCCAACACC  
 TTGACGCTGCCCCGAGCAACAGTTTCTTGGCAAGATCTGGACGGTGGTTTTGCCTGCGCG  
 GATGGTGAAGGCCAGATCGGTTTCTTGGAAACTCTGGAATCGGGGGTGGCGCTATCTGGT  
 GATTCCAGGGCGAAAAGTTTCAGCACAAACGCTGGTGGGGCAGTGGGCGTGGACAGTGGC  
 TTTGGCTACTATGTGGTCTCTGATTTTGGGCTGATGCACCCTGTTTCTACTGGTGAATCG  
 ATGGTTGCCCTAGGAATCACTGACGTGCAGGTGCGCGTGGAGCGTCTGCGATTGTTG  
 CCGCAGGGAAGTGAATTAGCAAAAGAGACAGCGCTCGCGCCACCTAT

>RXA01647-downstream  
 TAAGGAGTATGGTGGCCTTACAT

>RXA01656-upstream  
 TCGGCAAGCATGGCTTCATCGTCTCAAAAAAGTGGTCTAATGCAAGTGACTGAAAGTGG  
 ATCTACCGCTAGTCCACTTTGTGGCGTTGGATCATCTGTC

>RXA01656  
 ATGACCGAAACTCAAGAACTTACCAAGCAACCACTCGTGTGAAGCGCGGCCTTGCCGAC  
 ATGCTCAAGGGTGGTGTGATCATGGATGTGGTCAACCCCTGAACAAGCGCGCATCGCCGAA  
 GATGCAGGTGCCAGCGCAGTTATGGCACTCGAGCGCGTTCCCGCCGATATCCGTTCTCAG  
 GCGGGCTGCTCGCATGAGTGATCTGACCTGATCGAAGGAATCGTCAATGCGGCTCTCC  
 ATCCCGGTTCATGGCGAAAGCTCGCATCGGTCACTTCGTGGAAGCTCAGGTTCTGGAAGCT  
 CTCGGTGTGATTTTCATCGACGAGTCCGAAGTTCTCAGCCCTGCCGACTACACGCACCAC  
 ATCAACAAGTGGAAGTTTCGACGTTCTTTTCGTCTGTGGCGCGACCAACCTCGGCGAAGCT  
 TTGCGACGCATCACCGAAGGCGCTGCAATGATCCGTTCCAAGGGCGAAGCCGGCACCGGC  
 GATGTCTCTGAAGCTGTCCGTACCTGCGCACCATCCGCGGCGACATCAATCGCCTGCGC  
 TCCCTGGATGAGGATGAACTCTTCGTGCGCCGCAAGGAATTCCAGGCACCATACGACCTG  
 GTCCGCGAAGTCGCCCTCCACCGGAAGCTCCCTGTGGTCACTTCGTTGCAGGTGGCGTC  
 GCAACCCAGCCGACGCTGCACTCGTGCGCCAAATGGGCGCCGAAGGCGTCTTTGTGCGC  
 TCCGGCATCTTCAATCCGGCAATCCAGCGCCCGCGCGCAGCGATCGTCAAGGCTGCA  
 ACGCTTTTCGACGACCCCTCCGTCAATTGCCGACGTATCCCGCGGCTGGGTGAAGCCATG  
 GTGGGCATCAACGTATCCGACGTTCCAGCACACACCGACTCGCCGAGCGCGGCTGG

>RXA01656-downstream  
 TGATCGTTGGAGTTTTAGCTCTC

>RXA01658

GATCCACAGATCCTGTACCAACCTTCACCCAGCAACAGCAGCTGCGAAACTTCTACGGT  
 TTCCCAGACCAGCTGGCGATGGACCGCTTTGAAGTAGATGGCAAACCTCCGCGACTTTGT  
 GTGGCAGCACGTGAGCTCGATCCAAACGCCCTGCAGCAAAACCAGCAGGACTGGATTAAAC  
 CGTCACACTGTTTATACCCACGGCAACGGCTTCATTGCAGCTCAAGCAAACAGGTGGAT  
 GAGGTCGCCCCGCGACGTGGATCCACTCGTGGTGGTTACCCTGTCTACACCGTCTCTGAT  
 TTGCAGTCGAATGCTCGTGCTGCAGAAAGCGAAGATGCTGAGGAGCTTGGCATCAAGGTT  
 GATGAGCCTCGTGTGTACTACGGACCACTGATTGCTTCTGCGACTGATGGTGTGACTAC  
 GCAATTGTGGTGACACCGGCGATGGCCAGTCGAGTACGACACTGACACCTCCAGCTAC  
 ACCTACGAAGGTGCTGGCGGCGTGGACATTGGAACATGGTCAACCGTGCGATGTTTGCA  
 TTGCGCTACCAAGAAATGAACATGCTCCTGTCTGATCGTGTGGTTCCGAATCCAAGATC  
 CTATTTGAGCGCGATCCTCGTTCCCGTGTGGAAAAGGTTGCACCTGGTTGACCACTGAC  
 TCCAAGACCTACCCAACCTGTGATTGATGGTTCGCATCAAGTGGATCGTCGATGGCTACACC  
 ACCTTGGATAGTCTTCCGTACTCCACGCGCACCTCACTGACGGAAGCGACTCAGGATGCT  
 GTCATGCCTGACGGCACCCACAGCCACTGATCACAGATAGGGTCGGTTACATCCGCAAC  
 TCCGTGAAGGCTGTTGTTGATGCGTACGACGGAAGTGTGAAGTCTACGAATTCGACACC  
 GAAGATCCTGTTCTGAAGGCATGGCGTGGCGTGTTCAGACACCGTGAAGGACGGGTGCG  
 GAGATTTCCGATGAGCTTCGCGCACACCTGCGTTACCCAGAAGATTTGTTCAAGGTCCAG  
 CGTGACATGCTGGCCAAGTACAACGTTGATGATTCTGGAACATTCTTACCAACGATGCG  
 TTCTGGTCTGTCCCAGGTGACCCAACTGCAGCGGAGGGCCGCCAGGAAGTAAAGCAGCCT  
 CCTTACTACGTGGTGGCAGCAGACCCAGAGACCGGTGAGTCCAGCTTCCAGCTGATCACC  
 CCGTTCGCTGGACTTCAGCGCGAGTACCTCTCTGCACACATGTCTGCGTCGTCTGATCCA  
 GTTACCTACGGTGAAATCACTGTTCTGTGTGCTGCCTACCGATTCTGTGACCCAGGGTCCA  
 AAGCAGGCCCAGGATGCGATGATGTCATCTGACCAGGTTGCTCAGGACCAAACACTGTGG  
 CGTGGATCGAACGATCTGCACAACGGAACCTGTTGACCTTGCCAGTTGGTGGCGGAGAG  
 ATCCTCTACGTTGAGCCGATTTACTCGCAGCGCAAGGATCAGGCA

>RXA01659

CCAGAAGCTGTGACTGCTGTGTGGATGGAATCTGATTGGGTGTTGGCGGAAACCATCAAG  
 GGTTCCACGCCTTCCGATTGGGAAGAGATTTTGGCGCCGTTGGCGCTGCTCACGGACGCG  
 TCTTTTACGTTGCCACCTCGTTCACGCGTGCAGCAACCTTGGATTGAAGCATTGGA  
 CCAAGCCGTCTGAAGCCGAGCAGCCAGAAAAGCCAGCGTTTACTCCCAATGCTTCGGAA  
 GAAGATTTGTCTCAGCCGTTGGTGATCCGCCCCGAGGAGCCGTTGCAGATGCCGGTTCGC  
 GGTGTGCAGGAAAGCCGCGGAGTGGTTCGAGCCACGGTCATTGGGTGCGGATGATGTGGAG  
 TCGATTGCGGAGGGCGATCCAGAGCGTCCGAGCGATCTTTATGGCACGCGTGTGCTGCGT  
 GATCTCAATGGTCAGTCCAGTATTTTCCAAGATTCCACCGACGCGGATGAGCCACCAAAA  
 AAGTGG

>RXA01659-downstream

TAGAAAACCTGGTGTTTTTCGGCC

>RXA01663-upstream

TATTTTGCTGGTTGGTCACAGTGGAGCGCTAACCCCGAGAATCCTATCGAGGCCTAAAAT  
 CGTGGCTTGAGTACGCACTGCCAGTAAGGTGTGTGATGTG

>RXA01663

ATGGAAATAAGTGCTTTGATCATCGCCGCACTGATCTTGGTGGCAGGCATCGTACTGTGG  
 CGCGCGGACTCGTCTAAACAGGCAGCTAAAAAGGCTGAATCACCTGTGGGCTCAGTCGCA  
 CCTGCGCCCCGTGCTGGTTGAAGAAGAGCCGACCCCTGAGTTTGAGCCAGAAGTGGACCCCT  
 GAACCAGAAGCGCAACCAGAACCAGAGCTGGAAGTTGCGCCTAGATTTGCGCCAGAACCA  
 GTTCAAGATCTTGAGCCGGATCAGGCTGAGGACATTTATTTTGATGATTTCCCTGAACTC  
 GATGCTGATGTTGAAAATGCCCTTGGCTGAGCTTACTGAGGTAGAAGACTACCCGGAAGAG  
 CCAGTGCAGTCTGAGCAACCTCAAGCCCCCTGCCACGGCGGAGGTAGCTGCGGACGAGGAG  
 CAACGGGGCGTCGAT

>RXA01665-upstream

AGGATTGGCGCCCGTGACGCTACTGAAAAGGTGGAGGGGCGCGTCGAAAAGCGTTGGCCG  
GTGCTTGAGCGAAAACCCGTGATGATTAGCATGGTTTGT

>RXA01665

GTGAAGATCGATGAATTGATTGCTCTCGCCGCGGAGCAACCCACTCGCATCTCCAGGCGT  
TCCGGTGTCTCGCGCTCGACCCCTGAAGCGGGTCGGCGATGGCACCAGCGAGCCACCCCTG  
TCGACGCTGCGTGAGGTGCGGTTGGCGCTCGGGCTTGATATTAAGGTCGCCGCGCACCAC  
GCCTGCGATCCCTTTGCGGCCGCTGCAGCGCGCACGCTTATCGACGCTCCGTCCCCGAA  
AATCCCCACAACCAGGAAATTCGCTTGGTTGCACCGTTTGGAGCGGTGGAATATCAAC  
GATCCGCTCACCCCTTGCTCTGAAGCCGGAACGCTTCAGGGCATCACACATCGCCAGGAT  
GCGCAGTTTGTGAACTCAATCCACGCGGCATCGCTGAGCTACCGGAGCTTTTCCAACAG  
CACAAAACCAAATGGGCGCTGTCGGGCGCTGCGGCTGCCACGGTGATCATGGGACAAATT  
GTGCTGGGGAATTGATGTGTGGCACGAACCTGCCACGATCTCGATGTCTCAGCGCTG  
GGCACCATTGTTGATGTGGCAGAAGACGCCGATCTAATTCTCCTGCCCGCAACGGTCACG  
GAACTGGTGGGAAGTTACACCCAGGACAGGCTAAATTTGTGGCACCTGTGCAATTAGTT  
ATTGATCTACACAGCCTCCACATGTTTCGAGGAAGCCGATTACCTCACGAGCGGTTGGCGC

>RXA01665-downstream

TAAAATACTTAGCGTACGCACCC

>RXA01669

CACAACCTTTCCGACGCATTGACTGCGATTCTCTTTGGATTGCTTTCATACTTTCCCGG  
CGCGCAGCGACTCAAAAATATACGTATGGATTCAATCGTGAGAGGATTTAGCGGGGTTG  
TTTATTGTGCGGATGATTGCTCTTTTCGGCGATTGTTGCTGCATGGCAGGCGATCGACCGG  
ATGATTAATCCTCGCCCGATGGAGAATATTGAATGGGTGATTGCGGCAGGTGTTATTGGT  
TTCTTAGGAAATGAGGCTGTGGCAATGTATCGCATTCGGGTTGGTAAGAGGATTGGCTCG  
GCTGCTTTGGTTGCAGATGGCGTTCATGCTCGCACGGATGGTTTTACTTCACCTGCAGTT  
GTGCGAGGTGGTGTGGAGTTTTCTGGGATTCCCCCTGGCTGACCCAATTATCGGATTG  
ATCATTTCTGCGATGATTGCCACCCCTCTTGTGGTACGATCCGTTTCGGTTGGCAGACGC  
CTCATGGATGGAATTGAGCCGGAGTTGGTAGAGAAGGCTACGCACGCGATCTGGCATGTG  
AAGGAAATTGAGTCGATTGATCGACTGAGGTTGAGGTGGGTTGGACACCGTCTTCACGGC  
GATGCCACGGTCAGCACTTCTACATCATCGCTATCGGAAGCCACCGCAATCGCCCTTGAG  
GCTGAGCTTCCGTCAAACAACATCTTCCCAATGTGGATGAAATGACTGTGACCATCACC  
CCTTCCAAACCT

>RXA01669-downstream

TGAGTCCCGTGATACAATTGTTG

>RXA01671-upstream

TCTAAAAACACATTTTAAAGCCCTCCCGGCGCAGCTGAAAACTCAGTCGCCGGGAGGGCT  
TTTTTGTACCCGAATTTGTACCCGAATTTAAGGAATCGCT

>RXA01671

ATGAATCATGTTGTTAATTTTGCTTCACATTTGGAAGACGCAGCCCTGAAGCAAGCCGAA  
GCTACTGCCACCATGCCGTTTATTTACCCGCATGTGGCGTTGATGCCTGATGCTCACTTT  
GGGCTGGGTTTCGTCGGTGGGAACGGTGTTTCGGCACCAAGGGTGCATCATTCGGGCGGCT  
GTGGGTGTGGATATAGGTTGCGGAATGATAGGAGTGTGTACCAATTACACGGCCTCTGAC  
CTGGAGGGACGTGATTTGGTGACGCTTCGGGATTACATCGAGCGGGTGATTCCGTTGTCT  
CCTGGAAATTACAATTCCACCACCTTGAAGGAAACCGCAAGGTGAAGGTGCGCGAGTTG  
GAGGAACTCGCGGAGCGCGATGGTGTAGATTTGTGCGACTCTCCGACGTGGAAGCGCCAG  
TTGGGTTTCGCTTGGTGGAGGTAATCACTTCATTGAGTTGTGTCTTGATGAGTTGGATCGG  
GTGTGGATGTTTTTGACTCTGGTTCCCGCGGTGTGGGTAACAAGATTGCCATAAGCAC  
ATCAAGAACGCGCAGGCCAGTGTAAGAATGAGGAGCTTCCCGATAAGGATCTTGCGTAC  
CTTGACCGAGGGGAC

>RXA01671-downstream

TGAGGAGTTTGAGTCTTACATCA

>RXA01672

TCACCACTAGCAACCTTCCGAGTTGCACTGGCAATGTCCATCATCGGACTCGTGGCGTG  
ATCATCTGCGTAACCGTCCTCTATTTCGGACTTAACGTGGCTGGCGTCTGGCAGAACTTC  
AACGATGTCATCGGCGGTGTTGGTGCAGAACAAACCATCACCTTCGGGCTCGTCCGTGAGC  
ATTTCCGCACTTCTGGGAGCTATCGGAGCGATTACCGTCGCTGTGCTTGCACCATTGTGT  
GCAATCATCTACAACCTCGATTGTTGACCTCTTCGGTGGACTGCAGATTCAACTGCAAGAA  
GAAGTAGAC

>RXA01672-downstream

TAACCTCTGAAACACAAACCCCT

>RXA01673-upstream

AGTTTGCAGGTTCCGCCACCCATTATCCATATCAACATTATATGGGTGGATATGAAAGTA  
CCGTCTACCGCGTTCTTTTCAATTAGCGCAACCTTGAAGC

>RXA01673

ATGTCTACAAACCTTCTGGAATCGACGCCGCCCTTTACCCAACTTCGCACCGGAGTCCTC  
CAGAAGTACACCCCGGGCTGCTCTTATGCTCCATTGCGGTACTCATCGCTATGATCGTG  
AATCACTTTTTCTCTGGTGTGAGTCCGCTTATCGTCGCGATCATTCTTGGCATCATCCTG  
ACCAACCTGATTTCAGCTCCAGCATCGACCTCACCCGGCATCACGTTGGCGTCGAAAAAG  
CTTTTGGCGCTGGGAATCGTCTTCCCTTGGTCTGCAGTTAGTTTTCTCAGATATTTTGTCA  
CTTGGTTTTCCCATGCTGGCGGTGATTGTGTGCATCGTTGCCGGTGGTATTTTTGGGACC  
ATCCTCATGGGACACCTGCTCAGAATGAAACCAACCCAAGTTCTGTTGATTGCTTGTGGC  
TTTTCTATTTGTGGCGCTGCGGCCGTGGCAGGTGTTGAAGGAGTAACTGATTCCGAAGAA  
GAAGAGGTCGTTACTGCGGTTGCACTTGTGTGTTATTTTCGGAACGCTGATGATTCCTTTT  
ATCCCATTCGCAACCAAAAGTCTTGGGGTTATCCCTGAAATCGGTGGGATGTGGGCAGGC  
GGATCCATCCATGAAATCGCCCAAGTAGTAGCAGCTGGAGGAGTCATTGGTGGTGGAGCA  
TTAGGTGTTGTCAGTTGTGGTGAAACTCGCCCGAGTACTCCTACTTGCACCCATTGCTGCC  
ATTTTAAGTTTTTCGCCAGCGCCGCCAGGGTTACACGTCCCCCGATGGAAAGAGACCACCG  
GTCGTTCCCTATTTATCCTTGGATTCTTGGCGATGGTAGTTTTGCGCTCCACTGTTGCG  
CTCCCAGACGAGGTAATTGCGGCTGGAGGTTTCTTACAGACAGCCTTGCTCTCTGCAGCA  
ATGTTTGGTCTCGGGTGTGGCGTAAAAATCCAGAACCTGATCCATGTTGGGGTCAAGCCT  
TTCATTCTGGCTTTCGGATCCACGACACTTGTACCAGTATCGCACTTGCAGGCACCCTA  
CTACCCACCTCGGA

>RXA01673-downstream

TAGAACCGAAGACCCAGTTGTAC

>RXA01675-upstream

TTGCCGATTCTAGCGGGAGAATTAGTGTCCATCGCATCGAACCACATCTGATTTTGAGCC  
CTGGCTAACGGATTGTTTTTGACAGATTGGAATGACAATA

>RXA01675

ATGAACGAGATTCCAGAATGGTTGACTCTTGTATCTGTTGAAGCAGGAAAGAGACTTGGG  
CGGCCTGGGCCATTGGTGTTCGCGCGGAGTTGGTCACTTTGGCAGTTGAAGGGATTGAG  
CTTATTGAACTTGAGCCTTCATGGACTTCTGATTTGCCTCTGCCGGAATTCGGGTTCCCTA  
GCTGCGGATATGGTTGATTTCTATGATGATTATGAGTTTAGTGAATGGATTCCGGGTGCG  
TGGCCTCTTGCTTTAGATGGTGGAGGAGGTTTCTTTGCTTGTATCTCCGTGCTGCCAAC  
GCTGATGGAGAGATTCTGTTGTGTGGGTGCATGCCAGCAACTTGGGTGGGGTGATGAT  
GAGGCAGTACGCGTAGCTGCCTCGTTGGCAGATTTGTTGAGTCCGTCGAAA

>RXA01675-downstream

TAGAAGAATTAGCATTTACCGGA

>RXA01676-upstream

AGTTACAGCTTTTCTCGGTGGCACACTCGCGCTACTTAGCCCTTGTGCCGCACTCCTTTT  
ACCAGCATTTTTCATCCTCAGTGGGTGCTGGCCCCGCGC



>RXA01676  
 ATGATCCTTCACGGTGTGTGTCTACGCAGGACTTCTAGTACTTCTCGTGCCACTTGGC  
 CTTGGTGCGGGAATCCTCGGCGAGCTGTTTATCACCCAACGCCAGACCATCATCGTGGTT  
 TCATCGATCGTGCTGATTATCCTAGGTTTTGTCCAGATCTTCGGCGGCGGATTCGACTTC  
 GGAAAAGCACTCCCAGGATTAGATCGTCTGCAATCTAAGGCCACTGTGACCTCAGGTCTA  
 GGAAAGAGCTTTTACTAGGAATGACCAGTAGTATTGCCGGTTTTTGTTCGGGACCAATC  
 CTCGGCGCCGTTCTTACTTTGGCTGCCACCAGTGGAACCTCCATCACCTCAGCACTCATT  
 TTGAGTGCTTATGGTGCGGGAATGGTGCTGCCCCGTGATGGCTATTGCAGCGCTCTGGGCC  
 AAACCTCGGACAGCGTGACAGCAGATGCTCCGCGGCCGGAATTCACCTTCTTGGGCAGG  
 CAGTGGCACATTGTTTCTGTCTATTAGCGGTGCCCTGATCATCGCTGTCGGAATCCTCTTT  
 TGGTCCACGAACGGCCTTGTCTAGCATGCCGGAGCTCGTTCCAATGGACACCCAGATCTGG  
 CTACAGGAAGCCACATTCTCACTCGGGTCACCACTCTTTGACATCGCATTGATCATTGTC  
 GCCGCTGGCTTGTCTTGTACTTCTGGAACAAACGACAAAAGCGAAAAGAAGAAGCTCAG  
 GCACCCAAAGAAAGTGATGGGTTATTAACCCTCGC

>RXA01676-downstream  
 TAATTATTAGTTTTGGAGCGAGG

>RXA01677-upstream  
 GTCGCCATAGTTGAGTTTTATTCATGGCTTTTAGCTAGGCGACTTTAGTTGAGGGCTTTT  
 AGTTGAGGGCTTCCCAGCAGGGATGGTTAAGGAGAATTCA

>RXA01677  
 GTGAACCAACAGAGTAAAAAGTGGCTCGTACCGACACTGGTCTCATCATTCAGTGCTC  
 CTCATCGCAGTTGTTCTGTGTGATGTACCGAGGAAATGCGAGTGATACGGCCGAGGGCGTT  
 TCAGCCGCTGCGACTTCGGACTCGGCTGCTGCTTCGACTGCTGCTTCGGGTTCGGCTTCT  
 GGTGCTGCGGACTCCGATCTGACCAGCGTGGAAGCACGCGACCCCTCCGACCCTGTTGCG  
 GTGGGAGACGTTGATGCACCTGTTGGGTTAGTGGTGTTTTCCGACTACCAATGCCCGTTC  
 TGTGCAAAGTGAGCGATGAAACCCCTGCCACAGATGATGAAGCATGTGGAAGATGGAAAC  
 CTCGCGATTGAATGGCGTGAAAGTGAACATCTTTGGAGAACCATCTGAGCGTGGAGCTCGC  
 GCGCATACGCTGCGGGTTTTGCAGGACGCATACTTGGAAATACCACAACGCACTCTTTGCC  
 AACGGTGAAAAACCCAGCGAAGACCTGCTCAGCGAAGAGGGACTTATTAAGCTTGCTGGT  
 GACCTTGGACTAGACGAATCGAAATTCAGTCCGATTTCCTCAATCCCCCTGAACTGCAGTC  
 GCAATTGCGCAACATCAACAGCTGGGAATCGATCTTGGCGCCTACTCCACCCAGCTTTC  
 CTCCTAGGTGGCCAGCCAATCATGGGCGCTCAGCCTGCTTCTGTATTTGAAGCCGCCTTC  
 GAGCAAGCACTGGCAGCGAAAGAA

>RXA01677-downstream  
 TAAACCGTGATGTCGGCCTAGT

>RXA01681-upstream  
 CTTTAACGAAAGACTTGTCTGTTACTTTAGTAATTAGACCAACATGGTGGTGAGTGGTTGA  
 AATCTTGCCATCAAATTTATCGAGTGAGTTGAAGCATTC

>RXA01681  
 GTGGAAGTACTACTTATCGCAATCGTCTGTTGGTGGTGGCGTTTTTGTGCGCTCAAAG  
 ATGGGATCCAATAACAATAAGAAGCAAGAAGCAAGTTTTGCTGACGCACAGGCAGAT  
 GCGCGTCGGTGGATTGAGCGTCTTGGTTCCCAGGTTTTGACCATCGCAGGTACAGATGCT  
 GCGTCGACCCAGGCTATTGCTGACGCCTCAGAGCGCTATACCGCTGCGTCTTCTCAGATT  
 TCTTCTGCCACTACTCCTCGTCAGGCAGAGTTGGCTCGAGAATCTGCACTAGAGGGTCTG  
 CATTATATGAACGCGGCTCGTGAGATCATGGGTATGACTGCTGGCCCTGAGCTGCCTCCT  
 CTGGAAGGTGAGCGCAATGCTGGTTCGCGTTACAGAAAAGCGCACCATTTAGCAGGAGGGT  
 CGCCAGATCACTGCTTCCCCCGTCGCAACAGATGAACTCCGAACCTACTACCCTGGCGGT  
 AACGTTGCGGGTCGCCCAGTCCCTGCTGGTTGGTACTCCGAGCCTTGGTGGGCAAGCGCA  
 TTGCGTCCGGTCTGTGGACTGCAGGTTCCGGTCATGATGTTCTCAGCAATGTTTAACGGC  
 ATGGCTGGTGTGCGCTACTCCGCTGCAGACCTT

>RXA01681-downstream  
 TGAAAAATGGCTATGGCGAGGGC

>RXA01685-upstream

CAATAATTAGGTGAGCAACCCTAATAAGAAACCTTTAGATCCCGCACAAAGATTCTCCCT  
CCCCACCAGATGGGCGATGTTCTTTGTCTGGGATCTTTATT

>RXA01685

ATGTCCTTCGCCATCGGCATCACCGTCCACGCAGGACTAGGAACCACCACAATTTTCATCA  
CTTCCCGTGGTGTGGACTGCTGCCAGCGGATTATCCCTGGGCTGGACCACAATTTACTTC  
AATGGCTTCATGATTCTGTGCCAAATAATTGTGCTGCGTTCCAGTTCAAACCACAAATG  
TTAGTCCAAATCCTGTGGGCATTCTCTTTGGGTTTCTTTGTGATTTAAGCCTGCAACTA  
ACCACCTGGGCGCAAACCTGACAATTATTTTGTGGCCTGGATCTGGGTTATTGTGTCCACC  
ATTTTGATGTTCGATCGGAGTTTTTATTCAAGTACTCCCCAACATCACTTTTCATCGCTGGT  
GAAGGCATTGTCTCTGCGCTGGTGAAGAAATTTCCCAACGTGGAATTTGGCACCATGAAA  
CAAATCGTCGACTGGACTTTTCGTCTCCGTCTGCGTCCCATTTTGTCTGGATCACCATGGGT  
GGACTTATTGGCGTGCAGCAAGGAACAGTGTTCGCGCGCTTTTTCATCGGATTCTTCGTC  
CGCCAGTGGCGCAAACCTCTACCTCCGCTCCATCGGTCAC

>RXA01685-downstream

TAAAGAGCTTGTTCCAGGAAGAG

>RXA01686-upstream

GGAGGAAGGGTTGCAACGCTTTTTCAAGAGAATGACCGTGCGTCCGCTTAAACGAAGCGT  
CGAACGCCGGTCTTTTCTCATTTCACTTAAGATGTAGAAC

>RXA01686

ATGACTTCACCTCAGGGACTTACTTGTTCACCAATGCCGACGCAGCAATTGCAGATATG  
TCAGCATTTATCGAAGAAACCGTGGGCAAGCAATCCGGCATCAGCGGCATCGCACTCAAA  
GGCGCAATGGGTGCTGCAACCAAGATCGACTCCGACATCGTAGCCAAAGGCTCCAGGCGC  
CTCCTCCCGGAAATCGCTGACTCCCTCGACGGACTCTGGCAGGAATACCAAAATGGTGGC  
ACCGCCGCAGATTTTCGGCGCCCACCTCGAGGCCAACAGCTCCACCGCACTCGACGCGATT  
CTCAGCGTTGCTGACAAAAACGCAGAGAGCATCAACGTTCCAGGACTTGGCAAGGTCTAC  
AAGGGCGTGCGCGGCAAGGCTGCCAAAGTAATCGAGCAGGAACCTCCTGCAATTGGCCAG  
TTGATCGAAAAGAACGCACAA

>RXA01686-downstream

TAATTAGGTGAGCAACCCTAATA

>RXA01693-upstream

AGGAGACTGGCTGGATTATTGGCTGGTTTTCTTGGGAAATCGTCATGGGCATTAATCCTA  
GTCCCAACAATTGCCAGAACCCGAACACTAGGCTTGAACC

>RXA01693

ATGAATACTGCACCTTTCAAACCTCGAAGCTGACTTCGCATCAGCCCTGCCCACCATGGCA  
GCCCCCTGGCAAGGTGAGGAAGCCCCCAACCCCTGAGCTCGTGATTTTAAATGACGACCTC  
GCCTACAGCCTCGGGCTTGATCCGACATGGCTTCGCACACCTGAGGGCGTTCAATTTCTT  
CTCGGACTCAACCCCGAGCCCTTAACAAAAGCAGTTGCGCAGGCCTATTCCGCGCCACCA  
TTCGGACAGTTTTGTGGCAAGCCTTGGTGATGGCCGAGCGCTTCTTCTCGGCGAAGCCCGC  
TCAGCTGACGGCGTACTGCATGATATCCACCTCAAAGGATCTGGACGAACCCAATTCTCC  
CGAGGAGCCGATGGACGCGCCGTCCTTGGCCCCGTCTTACGCGAATACATCATCTCCGAA  
GCGATGCATGCACCTTGGTGTTCCCACCACAGGTCACTTGCAGTAATTAGCACCAGGTAGG  
AAAATCCAACGAGGAAGCGTAGCCCCAGGCGCAGTCCTTGTTCGAGTAGCAACCAGCCTC  
ATTTCGAGTCGGATCCTTCCAATACTCCAACATCTCTGGTGGCATCGAACTATCTCAACAC  
CTGGCGAACTATACGATCACCAGGCATTTCCCTTCGTTGGTAGCTGAACTATCCGCACCA  
ACCCCCGCAACTTATGTATCACTGTTTAAAGCGATTCTTCAGCGCCAAGCAGACACCGTT  
GGAAAATGGACCAGGCTGGGTTTCGTTACGGAGCCCTCAACACAGACAACACGTTGATA  
TCCGGAGAACTGTTGACTACGGCCCATGCGCTTTTCATGGAGCGCTACCGTGGCGACGCG  
AAATTTAGCTCCATCGACACTTATGGTCGCTACAAATTTGAAAACCAACCTATGATCCTC  
GGATGGAACATGGCCCGCCTCGTAGAAACCTCCTCCCACTCCTGGGCGCCACACCAGAC

GAAGGCATGACAGCAGCCCAAGAAGCTCTCGTAGAATTTCGATGACCTCTGCGAACAAGCA  
ATCCGAAAAGAATTTCGCCACTGCACCTGGGCCTTGACGAGTCAGACACCGGCACGGTAGAG  
CAGTTCCGTGAAGTCTCTACCTCCATAACCCGACATCACCACGCTGCTGCGCGCAGTCT  
ACCGACAACACCGCACCACCGAGTGGCTTTGAAGCATTTCGTTACGACTGGAAAACCCAA  
GACCCAGATATCGAAGCAATGCGAGCAGTAAATCCACTTTTCATTCCACGCAATCACCTC  
GTGGAAGCTGCTCTCGCAGACGCAGTTGAAGGGAATCTAGAAAAGTTCACGAACTCCTC  
GCTGCTGTACCAATCCTTTTGATCCAACCTGCGGGCCCCGATGAACCTACGCCTGCCAAGC  
GAAGAAGGATTTGAAGAAGACTACATGACCTTCTGCGGTACC

>RXA01693-downstream  
TAGGACAGATGGTGGGGCAGACG

>RXA01694-upstream  
CGACACCAATAATTTATTGGGTATCCACCAATTACCGCTGTGAGCACTGCAAATTACGTA  
TTCGAAAAGCCATGTCCACCACGTGTTCTATCCTGGCGGC

>RXA01694  
ATGCAAAAAATCACCCCAAACATCTGGTGCCAAGGCACCGCAGACGAAGCAGCCGAATTC  
TACGTCAATGCGTTTTCTGAGTTTCCGGGTGGCGCAGAAGTACTCACCACAGTTAAGTAT  
CCCGAAGCTGGCTTGCTGGACTTCCAGGAGCCTTTCGAGGAAAAACCTTGACGGTGGAA  
CTCGCTATCTCAGGCTTTAAGATCATCTTGATCAATGCTGGTGAAGAGTTCCTCCCAAC  
CCATCGATCAGCTTCATGGTGAATTTTGATGCGGTGCGTGATGAAAATGCCAAAGAGCAC  
CTTGATGCGGTGTGGGAAAACTCCATGAAGGCGGCAGCACACTGATGCCAGTCGATACT  
TACCCATTTTCGGAATACTACGGGTGGGTACAAGACAAATATGGTGTGAGCTGGCAATTG  
ATGCTCAGCCGCCCAGAAGAAAAGCCAGGTCCCGCAGTAATCCCAACGCTCTTATTTGGT  
GGGCGAGCTCAAAATCAGGCAGGCCAGCTCAAGAAAACACTACGTGAGGTGTTCCCGAAC  
TCCCAACTTGGTGATCGTGCACCTTATGGACAGCAAAACAGGTCTCGCCACTCCTGAGGCC  
CTCATGTTTTCCAGTTCCAACCTCGACGGTCAGTGGATTTTCGCGATGGATTCCGGAGTT  
GAGCAAGATTTACCTTCAGTGAGGGTGTCTCATTGATGTATGAAGCTCATGGTCAAGAA  
GAAGTCGATGCCATCTGGAATGCACCTCTCGGCAGTTCCAGAAGCTGAGGCTTGTGGTTGG  
TTGAAGGACAAGTTTCGGCGTGAGCTGGCAGATTGTTCCCGACAACATGGAGGAGCTCATG  
GCTAAACCCGGCGCGTATGAAAAGCTTCTTGCGATGAAGAAGATCAATATCGCGGAGTTC

>RXA01694-downstream  
TAGCAGTTCTAAGCGCTCCACGC

>RXA01696  
CACTCCGACCCAGTACTCATGGTGGAGGCCTACCGCCAGCTCGCTGAACAAAGCGACTAC  
CCACTGCACCTCGGTGTTACTGAAGCTGGTCCCAAGTTCATGGGAACAATCAAGTCTTCC  
GTAGCATTTCGGCGCTCTGCTGTCCAGGGCATCGGCGACACTATCCGTGTGTCTCTTTCT  
GCTGACCCAGTGGAAGAAATCAAGGTTGGCGACACAGATTCTGCAGTCCCTCAACCTGCGC  
CCACGCAAGCTGGAATCGTGTCTGCCCATCATGTGGCCGCGCACAGGTGATGTGTATC  
TCACCTTGCTGAAGAAGTCACCGAAGCACTCGACGGCATGGAAGTTCCACTGCGCGTCTGCT  
GTCATGGGTTGCGTTGTTAACGGCCCAGGTGAGGCTCGCGACGCTGACCTCGGTGTGCA  
TCCGGTAACGGCAAGGGCCAGATCTTTGTCAAGGGCGAAGTCATCAAGACTGTCCAGAA  
TCCAGATCGTGGAACCCCTCATCGAAGAAGCAATGCGTATCGCAGAGGAAATGGACCCA  
GAAGTCCTCGCTGCAGCAAGTGCTTCCGGTATGAAGGCTGAAGTGAAGGTAACCAAG

>RXA01696-downstream  
TAAGTTTTGGTTAATTAAGGCAC

>RXA01697-upstream  
TAGATCAACTAAGTATGAACGCGAATCCGACTTTGGTCGTACTGCAAGAATCGACCAGAG  
CCCATTAAAAAATGCCCCCGCGCAACGAACTAGTAATC

>RXA01697  
ATGTTTCAAGGACTAAAAGAACTACCCGACGCAAAAAGGCCGACGCTGCTGATCACCGTC  
ACCGTCGGGCTGATCGCCGTGCTGGTTACTTCTCTCTGCCCTACCGCCGGGCTTGGC

CACCAATCAGTATCCGCACTGAAATACCTAGCGGGTGATAATGAACTTATCCTCGCCGAT  
TCCGGATCCACCACGCTTTCCGCGTCCACGCTTTCTGATCAAGCAGTTGCCCCAACTCGAA  
GACGAAGGCGCACAGATGCTGTGGCAGGTCCGCGACCGAGTAGCAGACACCCCCACCATG  
CTCCTCAACTCCCCGTGACCTTGCGCCTGGTGAAGTATCCCTTCTGCGGAACTCGCTGAT  
TCGGAACTCGCTACTGCGCATGATGTAGTGGATTCTTCCAACGATCTGTACCTCGATCAC  
CTGCCCCGTGGTATTGATGAACACCTCCGATTTAGCCTCACTCGCGCAAGTCCGAGGCGTG  
ACAGGACCAGCAGGCGCATTCGCCCTCTGACGTTGCGCTCCCCCTCCGACACCGTTGCGCTC  
TCTGGATCCGAACGGTGGAACGCATCCGCCTCCTACCAGGGCGAACAGATGTCAC'TCAAC  
CTCATGATCGTCATGCTGTATGTCATCTCCGCACTCGTGCTCGGCGCATTCCTTACCAGTC  
TGGACCATCCAACGCCTCCGCGGCATCGCCATCTCTAGTGCTTTGGGAGCAGCCCCGCCGA  
GTACTT

>RXA01701-upstream  
GCCGATCAAATTCATTGATTGTTAATCGGAAGTTTTTTGAACAGGTAAAGCTAGGGGACC  
TGTTTCAGTGCCCTGTTGGCGGATGTATTAAGGAGAATGCCC

>RXA01701  
ATGCTGAGCCACGAAGAAATGTTGCGATCGCAGAAGATTTGCTGTCTAAACGCTACGGC  
GGTGTAACAACTCTTTCTGACGTGGAGCAGCTCAACGGTTCCGGCACCTCCGCGGTGCTG  
CGTGCCAGGGTGGCTAACTCCCCATTCCCTCCAACAGCGCTCCGTGGTGCTGAAGTACGTG  
CCCAGCACCGGAGACGTCTTTGATGATTCTGCGCTGGTGGTGAAATCGTCTCCTACCAG  
TTCACCACCTCCTTGTCGGAAGATGTCCGCCAGGGCCAGTCATTTTGGCCTATGACATT  
GACAAGCGCATCCTGGTCATTTTCAGATTCCGGC

>RXA01703  
CTCAAATACCTTTGCACACATCCACGCTGTGGTTTCAGGCTGTGTGCGGGAAGATGACCAAC  
TTCCACGGCGTTATTGATTGGGACACCGGTGACGGCGACGGCGGTTTGTTCAGGGCATT  
TTGGTCCGCTATTTAGCTGATGTGGCCATCCGCCTGCCTGACGATTCACCAACCAACCGG  
GAAACCAAAAAGATTGCAGCACGCCTGGTACTGGAATCGGCGGAAAGCGTATGGAACCAC  
CGATTGGAAGTTGATGGCCTTCCGGTATTGCCACAGACTGGACAACGGATGCACGCCTG  
CCACAAAACCTTTGGTTTGTAGTTCCCTCTAGTTTGAGCGATCTGGTGAGTGTGTGCGCGTG  
GATGAACGTGATCTGTCCGTGCAATTGTCCGGTTGGATGCTCATGGAAGCAGCAGCGAAA  
GTGGCCGAAGAACTGGAACAACGGCAATAGTTACACCGGTGCTCCCGA

>RXA01703-downstream  
TAGCCCCGATAGTGATGTGCTG

>RXA01709-upstream  
TTGTTGTCTGCAGGG

>RXA01709  
ATGCGCTCCGGCGTGGACATGATTCTTAATGAAACCGGGGGTGAAAAGATGCTTGCACAG  
GCAGATTTAGTCATCACTGGAGAAGGACGCATTGATGCACAGACCCCTCAGCGGGAAAGCT  
CCTACTGGAATCGCCAAACGGGCACGTGCGAAAGGAATTCCAGTACTGGCGGTTTGTGGG  
CAGAGCCTATTGGGTCCAGCAATCTCAAATGAGCTATTTGAAGACATCTACAGCTTTACC  
GATTTTCGAATCTGACATCAATGAATGCATTGCGAAACCCGCTCCCAATTTTGAAGGTATC  
GGTTTTAACATCGCCAAACATCATCTGAGT

>RXA01709-downstream  
TAGCGATATTTTCAGCAAACCGAT

>RXA01711-upstream  
TCTCGTGAGTTTCTCCCCGGTAGCACCTTCTATATCAGCCCCACGCCGCTCGGAGCAG  
GTGGGATAGCATCGGCAACGCGGTTGCATGGCCGTTGGCC

>RXA01711  
ATGTTGTGATGGCGCATCGCTTCTTCGTGCTTGCGATTAAACGGCGCAGTCACCGACGAT  
TTCACGACGGTTTATAGTGCTTTACGACGTTTCGTTGAAGGTATTCCGGTCTACAACGAG

GTCTACCACTTCGTCGATCCGCACCTACCTCTATAACCCGGGCGCCACCCTCCTATTGGCA  
CCATTGGGATATATACCCCATTTACGTTGGCTCGGTGGATGTTTCATCGCGGTGAACCTC  
CTTGCCATTGTTTTAGCGTTCGGGCTGCTGACCAGACTCTCCGGTTGGGCGCTGCGCAGC  
ATGGTGTGGCCGATTGCGATCGCCTTGGCGATGCTGACAGAAACCGTGCAAAACACCCTC  
ATTTTCTCCAACATCAACGGCATCCTGCTGCTCATGTTGGCGATTTTCTGTGGTGCCTG  
GTGCACAAAAAATCCTGGTTGGGCGGACTAGTCATTGGTTTGGCCATTTTGATCAAACCC  
ATGTTCTGCCACTTCTCTTCCCTACCTTTGGTGAAAAAGCAATGGGGATCGCTCATCCTC  
GGCATTTTAACCCAGTGATTTTCAATGCAGTGGCCTGGTTCTTAGTTCCGGGAGCATCT  
GAATACGTCACCCGCACGATGCCCTACCTTGGTGAAACTCGAGATTTTGCCAACAGCTCA  
CTCCCAGGCTTGGCCATCTATTTTCGGAATGCCACCTGGATGGAAATCACCTGGTTCTCTC  
ATCTTCGGCGCAATGGTTCGGCCTCGCAGTGTGGCACTCCTGAGATTCCGTAACACCGAG  
CCATACTTCTGGGCAGCAACCACCACCGGTGTACTCCTGACTGGCGTATTCTTCTGTCC  
TCACTGGGACAGATGTACTACTCCATGATGATCTTCCCTATGATCTTCACCCTGCTCGGA  
AGCCGATCCGTATTCCACAACCTGGGTTGCCTGGGTGCGCCGCTACTTCTTACTATCCCT  
GACACTTTCACCTCCCAGCGACTACCCGATGTAGCCCGCTGGATGGAAATTTTCAGCGCG  
ACCGTTGGTTGGGGACTATTGATAGTGGTTACATTTGTCTCGGCGCTAATCTGGTTTATT  
GGTGATATCCGAGCCAAGGGAACCTCCGAGCTCACCCATTACCACTGATCCAACGCACGAC  
CATCTTGAGAGGACAGCA

>RXA01711-downstream  
TGACAGACTTCAAACATCATCAGC

>RXA01714-upstream  
CATTGGATAATTAGCAGGAGTGAAGTTGCATCAAAGGACAAACATAAAATAAACGGGCGC  
CCTCCCCAGAGTTACCCCAATAATTAGTAAATTGCAGATT

>RXA01714  
GTGATCGATTCCGAAGCGACCTCTCAGCACAAAGACCTCAGCTACCCCGGCAGAGAGCACT  
CCCGCGGAGTTTCCGAAGCGGTTGAGTCTATGCACAGAGCGCGCCTGCGCCAGAACTT  
ACTTTGGGCACGATTAGGCCGCTCAGCGCCTGGCGCCGTTTTCGCACGCCATTGGACTC  
GAAGTCGGAAATCAAGAAGAGTCAGACGATGTCTCCACCAACAGCGAAGGTGATTCCTTT  
GGTCGTTTGATTCTGCTCCACGATCCGGGTGCCGAAGAAACCTGGGAAGGAGCAATGCGC  
CTTGTCGCCTATATCAAGCTGACATGGATCAGCTGTTGCTTCCGACCCGCTATTGCCC  
GAAGTAGCGTGGCAATGGCTTAACGAAGGTTTGGAAACAAGCCGGCGCAGGATTTACCAAC  
CTAGGCGGAACCGTAACCTCCACAACCTCGGTGCGCTTTGGTGAAATCGGTGGACCGCCA  
AGTGCCCTACCAAGTGGAATGCGTGCGTCTGGACCGCGACTGGCACCGACCTCACCGCG  
CATGTTGAAGCGTTCGACGAGTGCTTGCCCTCTGTTGCTGGACTTCCCCAGAGGGCGTC  
ACCGAACTACGAAGG

>RXA01714-downstream  
TAGATTGGACACCATGGTTTCCG

>RXA01715-upstream  
ACATGTTGTTGGAACATGCCGGCAGAGCCGACACTACGATTCATTTCGCTAAAGGGTCTGG  
CCTGACACTGGCAAAGATCCACGAAAGGAAGTTACCCT

>RXA01715  
GTGAGCGAGCTCGATATTAAACAGCTCAACAACTGCAGCGCTACTCTCAGTGGGCGGTG  
TTCCGTGCTATTCTCGAGCGCTCGATGATGATCGCACAGAAGTCACTGACCAAGCAGCC  
AAGTTCTTTGCCGACCTTGAAGCAGAAGGCAAGTCACTGTCCGTGGCATTTACAACGCC  
TCCGGCCTGCGCGCAGACGCTGACTACATGATCTGGTGGCACGCAAGAATTTCGAAGAC  
ATTCAGAAGGCCCTTCGCTGATTTCCGCCGCACCACCATTTTGGGTGAGGTTTCTGAGGTC  
TTCTGGATCGGAAACGCTCTCCACCGTCCATCTGAGTTCAACAAGGCTCACTTGCCTTCA  
TTCATCATGGGTGAAGAAGCAAAGGACTGGATCACTGTTTACCCGTTCTGCGCAGCTAC  
GACTGGTACATCATGGAGCCCTTGAAGCGTTCCCGCATTTCTCCGCGAGCACGGACAAGCT  
GCTGTGGAATTCCCAGATGTTCTGTCGCAACACTGTGCGCGCTTTTCGCACTGGGTGACTAC  
GAATGGGTGCTGGCTTTTCGAGGCTGATGAGTTGCACCGCATTTGTCGATTTGATGCACAAG  
ATGCGTTACACCGAGGCTCGCCTCCACGTCCGTGAGGAGCTGCCATTTATTCTGGACAG  
CGCGTCGACATTGCAGATCTGATTAAGGTTCTTCCT

>RXA01715-downstream  
TAAAAGCTGCTTTTCTAAACGAT

>RXA01729-upstream  
TCAAGGTCCGGCGATTCTTCAATTCTTCGAGTTCAGGAAATCGCATACTCTCTAGGCTAG  
TAAACTTTTCTACGAACCTATTACTAAGAAGGAGCCCGAA

>RXA01729  
GTGAAGTTGAGGACAATCCCAGCCCTGTTAGCCGTCGCACTTCTTGCAGGCTGTTTCGGGT  
GAAAGTGCTGATAGCCAAGCCGTTTCCGCTGAGGAAACCATGGAAGTAACCACTACCTCA  
ACCCCGGTGTTTCAAGCCAAAGAGGTAAGCCCAATCACAGTCCCAAGCGGCGATATCAGG  
GTTGAAGACCCAGGTCTCAATGTTGAATTTATCTTCCGAGGCACCCGCTACGGCACCAAC  
GGTGGCTCAATTATTCACATCGCGGTGAAAAACCTAAACGACGTAGCCCTGCCAGCCGAC  
GCCATCGATCCACCCACCTGGACATCGAAGACTACAACGGCAACAAAACCAACATCGAA  
ACCCTCTCCGGCGACGACAACATCCCCTCGACCTACCACTGGGTGCCGGCGCGACAACG  
AACCTGCAATACGCGTTCAACACCTCAAACGGCTCATTTGTCGAATGCTAAATTCCAGATC  
GGAAACGTCATCTACTCAGGCAATTTGAACAGCTTGGCG

>RXA01729-downstream  
TAAGTTCAAAAAATAATTTGAAT

>RXA01731-upstream  
GCTTTTGCAGCTGTGGGGTTGGGCTGGGGGCAAGTGTTCATGTAGGTGTCATTGATCGTT  
CACTCAAGGTGGACGTTGTGTTTCATGAATAACTTTTATG

>RXA01731  
ATGAACGCATCGTCCATTTCTTCCCGATTCAAGGATCTTTTGTGACACCCAGTATTGTT  
TTTGATTTTCGATGGCAGCTTGCCATTGGCCATGGCCCTGTCCTTGCGTATGCATTGTGT  
GTTGCACCGGAGGGTTCCAAGGACTTTCTGGAGCGTGTGCGCAGGGAGCTTCGGCGCTAT  
GACGATGGTCAGAGTATTTACCGTGATGGGTATGACATTGTGGCTAAGTTGGCGTCGGAA  
TTGGGGATTGATGATGGCAGCATGTCTGTGCTTATGGCGAGAGCCGGAAGTTGCTTGGT  
TCGGATTTAGCGCCTGTTGAGCATGTGCGGGGTATTAAGGATATTTTGTCTCGTTGAAA  
GGTCATGCTCGGTTGGTTTTAGCTACCAATGCCCCGAAAATGGCGTGCATGATTTGCTG  
CGTCAGTGGGGTGTGTGCTGATTTGTTTGATCAGTTGCATTTTGTGGTGGGTAAGCCTGCA  
GGGTTGATTTTCGATCATTTCTGATTTGCAGCTTGATGGTCCGGTGCTTGCGGTGGGCGAT  
ATTTATGAATTCGATCTGAGTCCTGCAGCGCAGTTAGGTGCAGATACGGCTCTGGTTGGA  
GCTACAGCAACCATTTCTGAAGCGAAGGTCTCCATGCGTGGAGATTCTATCGCTGATCTC  
CCTCTCCTTGCCGTTGTTTCCCGGGTCTCCTCTTCT

>RXA01731-downstream  
TAACTTCTTGTCTCATGTGCGT

>RXA01734-upstream  
ACGATCTGCCGAGAATCTCAAGAAAGTGCTCACTGCGCAGCACACCGTCACCGTCCAAG  
ACACCGGCACCGGGCGGATTTCACTCCTGGATGTGCAACC

>RXA01734  
ATGACAGATCCAATTGAGCAGGCATTTGAACGCATCCGCGCCGAAGCCATGCGCAGAAAT  
GGATCCGTTCCCGACCTCAATAAAAACGATGCTTTTTCGACGCCCACCTGCGCCGAAAGGG  
GGCGTCGAAAAGCGCAAAAAGGCCGTGCAAGCGGCCCTAGACGGCCGCCAGAAACGATAT  
GTGCGCGGCGCGAGTCTGTTGGATCGGTGCTGAACAAGGAAATTCAGCGTCGTGGCTGG  
GGCAAAGACATTGCCGGCGGTTGGGTGACGTCCAACCTGGGAAGAGCTTGTGGCGCGAAG  
ATTGCGCAGCATACGCGCGTGGAAATGATCAAAGATAAGAAGCTTTTTATCACTTGTGAT  
TCCACAGCGTGGGCCACCAATCTGCGCATGATGCAGCGGCAAATCCTGCAGGTAATCGCT  
GAAAAAGTGGGTCCAAATATTATTACAGAGCTGCGTATTTTTTGGGCCTCAGGCCCAAGC  
TGGCGCAAGGGGCCGTTGCACGTAAAAGGACGCGGTCCGAGAGACACATACGGA

>RXA01734-downstream  
TAGTTTGGTGATAAAAACCGTCG

>RXA01738-upstream  
GTGAGCTCTACCGCATCGACTCCCCAGAAGCAGAAACTGTAGAGCCCGGCGATCGTCTCC  
TTTACGTTCCCGAGTATTTAGCGAGGAGGTAAATGACAA

>RXA01738  
ATGAGAATTCTTCCCATCGGCCCCACGATGAAATCGCCGTCAACGGATCAATAGTCCTT  
CTATCCGAGCACGACGGAGACATCGTATCGGTTCGGCCCCGACCTCGGCACGGTGCGAGTT  
ACCCTTGAAGAGATCGAAAGTTTAGGTACACCGACGGCACCCCGCGATCTGGGTTCCTCGG  
GAAGTCGACGCATGCGTATCGTTGCTCCGCAACCGCGAGTTAGTGCGATTTCGATCCCCAC  
GATGGCAGTGAATTAACCTATCGGGAACATAGCGTTGCTTACGGTGCGAGTGGCAAGCCA  
TTGTTTCCCCGATTGGATCCAGCGGTGATCGGCATTGTGGAGCTGCGAGGTGAGGATCGT  
TTGCTTCTGGGCATGAATGCGCAGAAACGCCAACGCTATTCAATTAATCGCAGGTTATGTT  
TCGCATGGTGAGTCGCTGGAAGACGCATTACACAGAGAAGTGTCGAGGAAGCGGCGCGC  
CGGGTATCTGAGATTTCCCTATGTGTCGTCTCAACCATGGCCGATCTCTGGTTTCGCTGATG  
CTGGGTATGAAGGGCTTCACGGAAGATGAGTTGCCTCAAGGCGAAACTGATGGTGAATTA  
GCGGAGACAATCTGGGCTTCGCCACTAGACATTATCGATCGTAAGATTCCGATCGCCCCA  
CCCGGATCGATTGCCCTACGACATGATCAACGCCTGGGCGCGAGATAAACAAAAC

>RXA01738-downstream  
TAAGGGAGCTTTTTACAGTGATC

>RXA01741-upstream  
GCATCTCTGGCTTTTTCCTGCATGACAGATGATTGTAAGTGTGATGAAATAAGGCCAGATG  
AAGTAACTGTGTCGATTAAGTTTGGGGGAAATTTTTCAG

>RXA01741  
ATGACACACATCGCTTTAGCCAACTCTGCCCAAGTTCTGATCCGCCCCGATTCTGCGATT  
CAATTCGGCATCGACGCCACCCGCGCTGGCGTCTTAAATATCGATCCATCGCTGTCTGTCG  
CGAGTCGTCCCGGTGCTGCGGAATCTGCGGACCGCCCGACCGATCGTTGATGTCATCGCC  
GACCTCACGACTGCAGGCCTCGCACCCACCGCTGCGAGCAGTTTGCTCGAGGACCTTTTA  
GAATTCGGTGTGGTCCGCGAATCGGCGGCGGCGCAGGTGTGCTGTTTCGGGGACGGTTTCG  
CTTGTCGACGTCACCTCCTTCTCTTTTGGAAACCTCCGGCTTTGTTCCAGACCCCAGATC  
ATCGATGAGTCGCCTCGAGAGTTTTTCGAGCTTCCCTCCAGCCACATTTTGGTTCTCAAC  
AAGCTCGCAGATTTCCCAACGTCTATCCCCGCTGCTTCAAAATATGCGCCGACGTATCTG  
TGCGCCCGCATCGTCGATAATCGTGGCATCATCGGCCCGGGCGGAGATCACGATCGGGG  
CCGTGTTTGATGTGTGTGGATCTGCATCGCTGCGATATCGATCCGCATTGGCTCTCTATT  
ATCAATCAGCAACCCAACGGTCCCACCTTCTCTGATCCCGTCACGGAGATGGCGACGGCT  
GCCCGACTCGTCGCCTGGGTCACTGCCGATACATGGTTGCCCGGCGTTGTGGAGGAAGTA  
AACCCCCACGATCGAACAACTCGGTACGCACCTCCCTGTGCATCCAAAATGTCCGATG  
TGTTGGAGTTTAGGTTCC

>RXA01741-downstream  
TAAAGTGCTCCCAAATCGCGAG

>RXA01742-upstream  
TGGCTAAAGCGATGTGTGTCATCTGAAAAATTTCCCCCAAACCTTAATCGACACAGTTAC  
TTCATCTGGCCTTATTTTCATCACAGTTACAATCATCTGTC

>RXA01742  
ATGCAGGAAAAGCCAGAGATGCCAGCGATTGAGGTCATCCGTTACGCGAAACGCACCAAA  
ACTGTTCAAGCTCGAATTGTGGACGGGCAAATCCAGGTGCGCATCCCTGCGAGGATGTCT  
AAAGCGGAGGAAGAAAAAGCGGTGGGGGAGATCGTCGCAAAGCTAAAGCGACGCACCCAA  
TCGGCCGTCTCAAGCGACGCTGACCTGATTGAGCGCGCCATAAGTTGAACAAGACTGTG  
TTGGAGGGGCGGGCGCGGGTGGAAAGTATTCGGTGGGTGAGTAATCAGAAGGGCGGTGG

GGGTCGTGCACGGTGGCGACTGCGGAGATTTCGGATTTTCGGATCGTTTAAAGCACGTGCCG  
GATTATGTGTTGGATGCGGTGTTGGTGCATGAGCTGACGCATACGTTTATTGCGGGGCAT  
TCGGCGGAGTTTTCGGAGTGGGCAGACAAAACGCCCCCTGGCAGAGAGGGCCAAGGGCTAT  
TTGGAGGCGTATCAGCGGTGGGGC

>RXA01742-downstream  
TGAAGGTTTAGTTCTTGTCTGGAG

>RXA01748-upstream  
ATCACCAATGTGCGGTTTTGCGTCGAAAAGCGTGCTCTTTCTACACCTCTTTGAGGTT  
CATTTTCGCGGTTTCCCTCACAAATCGCCTATTGTAAAGTAC

>RXA01748  
ATGGCAGACGCGAAAAAGCAGGCGGATAAAGCCGCCAAGAAGCAGGTAAGAGCAGCCAAG  
AAGGCACAGCGCAAGGAGACTCGCTCACAAATGTGGCAGGTCTTCAACATGCAACGCAAG  
CAGGATAAGGCTCTTATTTCCGCTTCTGTTGCTCGCTATTCTTGGTATCCCGCTGGTCTTT  
TTCTCATCGGTTTGATTTGGGGTGGTCAGTGGTGGATGCTTCCGATCGGCATTGCTGCA  
GGTGTGTAGCTGCAATGTTTATTTTACCCGTCGCGTTGAGCGTGACGTGTACAAGCGC  
GCCGAAGGTCAGCAGGGTGCTGCTGGTTGGGCTGTGGAGAACCTCCGCTCTGGCGTGGGC  
ATGACCTGGCGCACCAAGACCGCTGTTGCAGTGACCACTCAGATGGATGCAGTGCACCGC  
GTCAATTGGTCTGTGTGGTGTGTGCTGGTCGGCGAGGGCTCCCCCACCAGCTGAAGCCA  
ATGCTTGGCGCAGCAAAAAGAAGCGCCTGAACCGCGTGGCACCTGGTGTTCAGTGTATGAA  
ATCATCACGGGCAACGGCGAAGGCCAGACCCCTATCGCGAAGCTGCAGCGTGAAGTGGTC  
AAGCTGCCTCGCAACTACAAGAAGACGACGTCGCTGCCCTGGCCGCTCGCATTTAGGCT  
ATGGACAATGTGCGAAACGCTCCTGGCGGATCTTTGCCTAAGGGTCCATTGCCAAAGGGC  
GCAAGCATGTCCGGTATGAACCGCCGCGCTCGCCGACAGGCTGAACGCAAGGGCGAGGCT

>RXA01748-downstream  
TAAAGCCTTTTCGCTTTTCGCGTC

>RXA01749-upstream  
GGTTTTTTCGCTGCTCTGGTTTAGGGACTGGTTTTTGGGAACGTGCCCAGTTCCACATCAAA  
TAACGCTGAGGTCTGACTTAATCCATGAGATCATGAATGG

>RXA01749  
GTGAGCTTCCTTGTAGAAAATCAATTACTCGCGTTGGTTGTTCATCATGACGGTCGGACTA  
TTGCTCGGCCGATCAAAATTTTCGGGTTCCGCTCGCGCTCGCCGCTGTACTGTTGTA  
GGTCTAGCGCTATCCACCATTGAGCCGGATATTCCGTCCTCATCCCTCATTTACGTGGTT  
GGACTGTGCTTTTTGTCTACACGATCGGTCTGGAAGCCGGCCCTGGATTCTTCACCTCC  
ATGAAAACCACTGGTCTGCGCAACAACGCACTGACCTTGGGCGCCATCATCGCCACCACG  
GCACTCGCATGGGCACTCATCAGTTTTGAACATCGATGCCGCTCCGGCGCCGGCATG  
CTCACCAGCGCGCTCACCAACACCCAGCCATGGCCGCGAGTTGTTGACGCACTTCCTTCG  
CTTATCGACGACACCGGCCAGCTTCACCTCATCGCCGAGCTGCCCGCTCGTCGCATATTCC  
TTGGCATAACCCCTCGGTGTGCTCATCGTTATTTCTCTCCATCGCCATCTTACGCTCTGTG  
TTCAAAGTCGACCACAACAAGAAGCCGAAGAAGCGGGCGTTGCGGTCCAGGAACCAAA  
GGCCGTGCGCATCCGCGTCACCGTCGCTGATCTTCCAGCCCTGGAGAACATCCCAGAGCTG  
CTCAACCTCCACGTCAATTGTGTCCCGAGTGGAACGAGACGGTGAGCAATTCATCCCGCTT  
TATGGCGAACACGCACGCATCGGCGATGTCTTAACAGTGGTGGGTGCCGATGAAGAACTC  
AACCAGCGCGGAAAAAGCCATCGGTGAACCTATGACGGCGACCCCTACAGCAATGTGGAA  
CTTGATTACCGACGCATCTTCGTCTCAAACACAGCAGTCGTGGGCACTCCCCTATCCAAG  
CTCCAGCCACTGTTTTAAAGACATGCTGATCACCCGCATCAGGCGCGGCGACACAGATTTG  
GTGGCCTCCTCCGACATGACTTTGCAGCTCGGTGACCGTGTCCGCGTTGTGCGACACAGCA  
GAAAAACTCCGCGAAGCAACCAATTGCTCGGCGATTCCTACAAGAACTCTCCGATTTTC  
AACCTGCTCCCACTCGCTGCCGGCCTCATGATCGGTGTGCTTGTGCGCATGGTGGAGTTC  
CCACTACCAGGTGGAAGCTCCCTGAACTGGGTAAACGCAGGTGGAGCCGCTAGTTGTGCG  
CTGCTGCTCGGCATGATCAATCGCACAGGCAAGTTTCGTCTGGCAAATCCCTACGGAGCA  
AACCTTGCCCTTCGCCAACTGGGCATCACACTATTTTTGGCTGCCATCGGTACCTCAGCG  
GGCGCAGGATTTGATCAGCGATCAGCGACCCCAATCACTACCATCATCGGCTTCGGT  
GCGCTGCTCACTTTGTTTCATCTCCATCAGGTGCTGTTTCGTTGGCCACAACTGATGAAA



ATCCCCCTTCGGTGAAACCGCTGGCATCCTCGCCGGTACGCAAACCCACCCTGCTGTGCTG  
AGTTATGTGTGATGCTTCCCGCAACGAGCTCCCTGCCATGGGTATACCTCTGTGTAT  
CCGCTGGCGATGATCGCAAAGATCCTGGCCGCCCAAACGTTGTTGTTCTTACTTATC

>RXA01749-downstream  
TAGCATTGACCCCTTAAGCGCAG

>RXA01750-upstream  
TCGCCCCGAGGATTGTGTTGCGAACAGTCCTGAAGATCATGTCAGACCTACATTGAGCC  
AATGATCGACATGTGGACGAGGGAACTCGACCGAACAAT

>RXA01750  
ATGTGTATCAACGACCCCTAAAGGCGAGTTGCTGAAGAAAAATTATGTTCCGGATGTCTAAG  
CGCGGTTTTTCAGGTTGTTTCACTTTAACCCTGATTAACAACCTGAAAACTGATATTTATAAC  
CCGTTGGGATTAGCAGCCGAAGCAGCTCGCGAAGGTAACGGGATGAAGTGCAGCAACCTAT  
GTGGAAAATATCGCAGAGGTGTTCTTTCCGGTGGACGGTGCCGATGATCCGGTATGGCCG  
AATGCGGCCAACAAATGCCTTCAAGCGTGCAGCCTATGGTCTTATCGACTTCTATTTGGAA  
GAGGAGCGCGAGATGCGCAAGCAGGCTGCAGCTGAGAATTGGGATGCCAAGGTGCTTGAT  
ACACGTATTGATCAGATGTGGGGTAAGGTCACGCTCTACAACCTGCTACCAGCTCTTTGTG  
CAGCTTTTCGGCAAAGAAGCTGAAGAATCCCGTTGAGCGACTCAATGAACGTGCACGTGCC  
GGTGAATTCGGTAACCTTAGAGACTGATGAAAATGCAGCCATGATGTTCCAGGATGCTGTG  
ACAGAGGCCGAAGAGAACGAAATGTTCTGTGGGAGGGTGAGAAAGAAAAAGACATGCTC  
ACCTTGTTCTTTAGTGCCACAGACGGTCTGCCAAAGTCCAGTGTTCTGCTACTCTGGTGGGC  
AACGCAGATAAGGCCCTGAAAGCAATGGGTGGCGCTGAAAAAATGATGGCGTCGGTCTAC  
GGTATCGCGATTACAGCGATGTCCTTCTTTACAGACCCACAATTTCAACGTTAACCTCA  
GGCACACTAAGTCAGAACGTTGACTTGGCCGGATTGTCGTTTCCACGGCGCATGGGTGTT  
CGTTTTTGCGGCCCCCTATGTGAAGCGCTACAACCTGGTTGGATCACAGGTGAAATGGGAT  
GCGTATAGTGACGCCAAGTTTACCAAGCCGTTGGGTAAGAATTTTGTTCATGATGACACG  
CTGTCCGTTGAGGGTTGGGCGCGTTCTATATTAAAGACTCGTTCCCGAGTAATACTGCG  
TACCTGCGTTTTCGGGATTCTCAATGGTACTTCTGGCACGTTGATCAAGACTCTGTACTTC  
AAGTTACCAAGGGCTACCAAACGAACCTTAAAGGCCGTGCGTTTATTACTGATCCGGTG  
ACCGATGAGAAGATCATTAAGAATGGTCTGCTGATCGAGCTGGTGAAAAACGATGCTGGT  
GACTTTGTTCCAGGTCATGTGCAGTTTAAAGACGAAGAACTGAATCTTGACCAACTCACG  
CAGGAACAGATCAATATGCCGGGTCATGACATGATCAAGCAGGTTGATGCGATGGTTGAT  
GCGGTGTGCGCTCTGAATGTGCGGTATTCGGAGAAGCCTAAGGCAGTGTTCTTCGTAACG  
CCTCCGCATCTTATGAAATATGCGAAGTTGATTTTGTATCTCATCAAACAGCTTGTGGAT  
CTGAACCTCGATTCTTCGTATATGACGCGTGAGAATCAGAAGCCGGATTATAAGACTCGT  
TTCATGTTGGACGAGTTGGGAAACCTTCAGAGTGAGGGTCATGGTATTGCGGGATTGTGA  
ACCATGCTCTCGATCGGTCTGGGACAAGAACAACAATTTAGTGCGACCAGTTGCGTAGCG  
AAAACTACGCTCTTGCAGCT

>RXA01750-downstream  
TAAAGTTGCAAGAACTGTTTCA

>RXA01752-upstream  
GAAATGACGTGACCATCGATACCAATACCCAATTGAAAGATCTTGACCTGGTCAGCCAAG  
TTGGCCGTCAGATCGTGGCAGAACACAGGTGGGGAGGTC

>RXA01752  
ATGATGGAACAAGATCTCAGCTACCGTGAAATTCTTCCCCTCAACGCGAGTGAGGAGAAG  
AAAAAGGCTGCACTGATTGATGCCATTGAAGGGTTAAGGGTGCGCGATCCGCTACTCTCT  
GCCTCGATTGCATTTACTAGAGGGCAGAAAGTCGCCCTTCATTGCTGTGGTGGTGGGCTTT  
ATCTTGATGCTCATTTTGTCTCGGCAAGCAGCACTTATTTGGACTGTCAGCAACGTGTACG  
TTCATGTACCTCATTAATTTGTTGGACAGATTTATCATGTTTTCAGAGGTATCCGCGCG  
GAATCCATCATCCAGGTATCGGATGAAGATGCGCTGGCTTTCCCTGAGGACAAGCTGAAA  
ACCTACACGGTGTGTTGGTGGCCGCTATGGCGAACCTGAGGTGATTGCGCAGCTGCTGGCA  
TCCATGCACGCTTTTGATTACCCCAAGCATCTTCTGCAGGTATTGCTCATGTTGGAGGAA  
GATGATCTGCCACGATCGCCGCGCAGAGGCAGCGGGAGTGGATCAGGTGGCAACGATC  
ATTAAGGTGCCG

>RXA01753-upstream

CTGATTGTGCGACCCGTTGGTGTCAGTGTCCAGGCGTTTCGCAAAAAGGATACAAATGATTT  
CTTCTTTACCCAGTAGAACGCAGGGGAGGAGGTGGGTCC

>RXA01753

ATGAGTAACCCGTCGCTAGAACCTCTAGAACCGATCGAGCTTTCTGACGGTACTGAAATT  
GAAGTTTCAGACGTTGATCCAGAACCGCAAGCTGGCAATGCGCAGATGGAAGTACCCAGC  
TTACGGACATATGTTTTTCGCGGAATCATTGCCATTGCCTGTTTGATCATTGGTTTTTAT  
GAGAGCTTTGTGCTGATGTGGCAAAACCTCCGAATCGGCGTGGCCAACTACTCACTACTT  
GTGGTGCTCATGGCGATCGTGTTGTTTATCGGACTGGACCGCAAGCGTGCTCGTGCAATTG  
AACATTACGACCGCGAAGTCGACTACATCATTGGTGGCATTGTCTGACTGATAGCCATC  
ACGATTAAGAGCCAGCTTCTGCCACGTTTTGTGGACTGGGAACTCTGCTGCGCTTGGAT  
ATGTTTCGCACTGTTATTCTTTGCGTTTTGGTATTTCCGGCCTGGTGTGGCATGCGCTCT  
ACCTTTTCTTTTGACCCCGCTGGATTTTGCTGTTTGGCTACAACGCGGTGGCACACCTG  
ATCATCTCGGTGATTTTCGGTGGTGGCTTTTGGGGCCCGGTGATGGCAAAACATCATTGGA  
CTGTCTCTTGCGGTGTTGGTGTCCTCCAACAGGGACCTGGTTCAGGCCACCTATTTGGCA  
CTGATGACGGTGTTGTTTGGCGTCATTATTGCCATCATCGTGTTGGGCGCTGACCGATGGC  
AGTAAGTTTCTTCACCTTGGTCCCAGCAGTGCTGGCAACCATCACTGTGGTGTGGTGTCT  
TCGCGTTGGAGGCTTGGTCACTGGGAAAATTCGTCTGTAGACAACCCACGGTGGAAGGCC  
GGACCCGCGCTTATCGCGGTCTGTTGTCGACAGCACTCTTGGCGTGGATTCTTACTCTCT  
TATGTGGAGCGCGTCAACAACCTCCCCGGGCTTCAAATGCTGGCAAAGCCTGCCCCAGGT  
GTTATCGCACCTATTGGTTGGCACATCGACGATGTGCAGTATTACAACCTGGGCTTCGCGC  
TACTTCGGCCCCGGTTCCCTCTCTGCTTAGGCAGACGATGACGGCAGATCAATTACAACGAG  
GCGTGGGATCCAGATGGACTCGACCGAAGTGTGTGGTGGATACCCCTCCAATCGGCGGAA  
CGGTTCCAGCAGCGTGCCCTTGGTGACGAGACGCTGTATTCCACTCTGAGAGGTCGAAAG  
TCAGATACCGTCCAGGTGGATCTGGGATACGGCGTGGACGGACGCGCTACACGGTGCTC  
GATGAAACTGACTTCTTGACGTACACCAAGCTGGTTTTTGAATGGCAGACCACCAACAAC  
ACCGTGGAGAAGATCTCCGTCATCGCGGTGGATGATCACCGCGCAGAAGCGAAGTTCCCG  
GAGCTTGACCATCGGTTACCAGAATGTTTATCCAGGTGGCTACCATTTTGTTCCTGGA  
AATGACGTGACCATCGATACCAATACCCAATTGAAAGATCTTGACCTGGTCAGCCAAGTT  
GGCCGTCAGATCGTGGCAGAACAACAGGTGGGGAGGTCA

>RXA01753-downstream

TGATGGAACAAGATCTCAGCTAC

>RXA01754-upstream

TGTGGCTGAAGACAAGAATGAATAGCATTATCTCGTCAATTTTCATGTAGAAATTTGTC  
CCCCTTTTTTTTTGATGTGAAAGTTGAATCGGTAAGCTCCT

>RXA01754

GTGAAAATTAATCCGTATTTTTGAGCACCGCTTTAAGCGCTTCCTTACTGCTCGGAATC  
ACCCACCCGCTGCTGGGAGCAACGATCAACCCAGTTTGCCTCTTCTGCGTTGAGCTCC  
TCGGACGATATCGCCGTACCCAACCTTCGCCAAAGAATTACCGTTAGCTTTTGATGTACCA  
GCAGGCACTGTTCCCCAAAGCTTGAGTGGAACGCTGCAGATTCCCTGCCGAGTTTTCTGGC  
GGCGTCGTGGAGTTTTATGACGGTGACCGGCTCTTTCACACCCTGCGCCTAGAAGTTAAT  
GATTCCCCGAGCACACATTGAGGTTCCGCTGCAAAGCGTTCCTGTGCAAGACGGCCGCGCC  
ACCTTTTGGTTGCGCGCCATGTTGGATCCTGTAAACAACCAAGTGGTGCTACGAGGAGCAG  
GAAGTCCGCTTCTTAGACGGAAACGTACCTTTGAAGGGGCGACGATTAACCCAGCTGTG  
GTGGCTGATTACTTCCCGTCAGTGCTGCGCGCGTTGACAAATTACGTCCCGGAAAACCC  
TCTGAGGCAGTACAAGAAGCCACGTTAGAGGTGCGACCTCCCTGGATTTCGGTGTACCGA  
AGATCAGGTCTGGATGTCAACGTAGAAACGCTTCCAACCGGCACCGATGCTCCTCCTACA  
CGTCCTCAAGATTTTGAACGCCAGATTGTGCTGGTTGACGAGGCAACAGAAAGTAACACG  
CAAAAAACCGAATTGGTCAATCCCGGCCAAGACAATGCATTCTTGCGCCTGAACGGCAAC  
GCCGACGAGCTTTACGATCAAGCGCGCTTGCTTACCGACGCAACCCCTGCCACTTGCCGTA  
GACACCGAAGTAACGGCCTCAGGTTTTGGTGTGTGCCAACCTTTCTACAGATGTGGCC  
ACCTTCCAAGAACTGGGTATCACGCAGCTCACCTCTGAATCAGTTGCGCGCACAAAGCGTC  
ACCTTGGGCATTGAACGCTCCCGCCTGCGGACCTACTCGCAGTCCATGGACCTGCACATA  
ACGGGAACCTACACCCCATTTGCCACCCCAAAATGCAGGACAGATCACGTTCTCCATTGGT  
GACACCGTGTGGACTCCTTGACCACCGATGACACTGGCATCATTGACCGTGAGTTCAAC

GTTCTGAGACTTGGTCAACCGCTACACGGCGATCGTCGTGGAATTCACCAGCACCGGC  
 GACGTTAATTGTGGGGTCACCCAGCCCGTAGGCCTCAACATTGATTCCGACAGCCTTGTC  
 ACCTCCCAACATTTCAGATGTTCTGTACTCAACGGCTTCCGGTCCCTACCGCAGTCCTTC  
 CAACCTCGTGTGGACGTGGCGTTTGTGATCCCAGCGTGCAGGAACCTCTCCGCGCTGTC  
 AGCGTAGTGTGGGAATTCATCTATGAGCTCCCAGCGCATCCGCCACACCTGGTTAAC  
 TGGGATGAAGCCGTAGCCAGCGAGCGCCCAACAATTTTCATTGATGCTGCGGGCGCAAAG  
 ACTGATCAAGTGCCAAAGCTACCTCGCCCAACAAGGCCAAACCTAGAGATCACCAGCAAG  
 AACGACCAAAATGCGGACGGCGAACAACCTACCCGATCCCTGCAAACCAACGCTGCGCTT  
 GTTGTGCGTTCCATTTCAGGCCGTGTGGGATGCCGATAAGAAGCGCACGGTGATTGTGGCA  
 AGTTCCCAGGACAACCCCCCGATTTGGATGCCTTGATTTCGTGGATGGGAGAAGACCGC  
 GAACGCTGGAGTGATCTCAACGGCGACCTGATTGTCAAAGTCCGAGACCGCGAACCTGTG  
 CAATTGACCACCGTGGAAAGCCCCAGATCAGCCTGGTTCGATCGGCCACAGCCTTTATTGCG  
 ATCGGCGTCAGCCTTGTGGTCAATTGCCCTGATTGTGCGAGCCGTGGTGTGAGTGTCCAGG  
 CGTTTCGCAAAAAGGATACAAA

>RXA01754-downstream  
 TGATTTCTTCTTTACCCAGTAGA

>RXA01760-upstream  
 ACCTACTCAAACCTTCTCTGCGCCATAACGTGAAGTGAGTGCCGGGGCAGTCCCGGCAG  
 CACCCAAAAGCGCATTTTGTATACGAAAGTGAGTCATACG

>RXA01760  
 ATGGCAGCATTTCTAGAGATCACCTTGAAAATCAATGACGAAGGCCGCCATCAGCAGCT  
 GGCGTCTACCAGGAATACAAGCAACCATTCCTCAGCTCAATTGCTGGCGCTACAAGCAAA  
 GAACTCCTCATCCGAGAAGAAGACGTGCAGGTGCTCCACGGCTGTGACACCGTAGCTAAT  
 GCTGAAGATTATCTTGTGTCAGCGAACTGTTACGCGCCGATGTTGTGCGGTGGTCTAGCTCCA  
 CTATTGACAGGTGATCCAGAGATTTCGTATTTACCAGGTCGCG

>RXA01760-downstream  
 TAACTGCTGTGGCAGGCTCATCG

>RXA01761  
 GCTGATGCTAACGCTGATTTTGTAGACGGTGTGTTGATGGTGCCTGGTCGCGCGTCATTT  
 AGCAATGCTGCGTATAGCTCCGATGGAACCACTCTCGACGGTGAGGGTGCGAGCGTTGAT  
 GCACAGGGTAACCCGCTTCATGCTGATGGCACACCAATGAGTGTGCTGAAGCTGAAATG  
 AAGATGGCTGGTCTGAGCTCGTCAGGAACCATGATGGAGAAATCTGGTGTGAAATCGAGT  
 GGCATTACCACTGCAGCGGATGTCATGGACGATCAGTCTCTGGCAAGCAGTGTCACTGAG  
 TCTGGTCTGTCTCCAAAGATTCCAGACACCTATGGTGCAGATGTCTCGGGTGCTGCGGGCACA  
 GTCGGAACCTACCGGTGCTGATTACAGTGCGACCGATTCAAGCGCAGGTCTGAACATGAGC  
 GAGGCTGCATTGCAGAGTGGCACCCCAATGGGCGCTCTCGCTGGTGGATCTGTGTCGAGT  
 TCCGATCAGGCCATGAATGACGCAGCTCTTCAGATTGCAGCGTCTCAGGGTCTTGACCA  
 GCAGGTTCATAGCTGGTATGGAGCAACTTAGTGCTCAAGCCACTGAAGCACCTGCTGGA  
 AAGGCCGGCAAGCAGCTTGGCGATCTTTCTGGCTCAGCGCTCAATACTCAGCTGGCGTCC  
 ATGGGACAGCAGGTAGGTGACAGTGTGAACAGCGCTTATGCTGCAGGCGGTATGGGTGGT  
 GTTGTGATGTGGCTGGCAAGGTACCGAGGCAGCACAGCACTTGTCTCAGGTTCAGGTCAG  
 ATTCAGAATGCTGTGACCAATGCGGATGCTGGTTCCCTCTGGCGCAAGCTTTGGTCAGATG  
 GCACAGGGGGCAGCTGGTATTGCCGGTGTGCGAGGTGTGATCGGTGCAGCGGGCGCAGCA  
 AGCTCTGCAGCACAAAGGCGCAGGTACTGTCCAGGGTGCAGTGGGTAATGCTGCAGCTGGT  
 GCGGGAATGATCAACAACGCTGTTTCCGGTGGAGCTACTGGCTCAACAGGTGCCGCACAT  
 GTGGTCAATGCATCACATGGACAGTGGCGCCTGGTCAAGGCTCACTACCAAGAGTCTGGT  
 CATGCACAAGCATTTGTGTCAGAACCAACAGGCCAACACCGCGCACACAGCAACACGCGT  
 GCACCGTTCATCAGCTCAAATTATGGGCGCGAACGTTGCTGGCTCACTGGCATCACAGGCT  
 GTACGAGGAATCGGTGAGCCTGGTCAGATGGGTGCTAATGTTTCGCGACGCGATGGGTGGC  
 AGCGGACGCTCTGGTGGCCGTGGTGGAGCAACTCAAGGCGGTGAGGCGCACAGCGCAGC  
 GGTGTGCTAGTGTGAAGACGGTATCCGTGCACAGCGAGGTGAGAAGCCTTCTGTGACCGGC  
 CAGGCGATGAATGCAGCAATGCGTTTCAGCAGCGGTAAGCGGTGCGATGGCAAACATGGAC  
 GGCAACAGTGTAGGTGGCACTGAAGCAGATCCACAGCAGGGGAGTGGCGTAACCGAGAAG  
 GGTGATAAAGGCGTTAAA

>RXA01761-downstream  
TAGCGTGTAACACCAATGACCG

>RXA01765-upstream  
GCAGTCCGTCGGTGTCTTTTCCCTGAACTGCCGGCAGAGCTTCAGCCACAAATCCCAGT  
CAAGGCATAACACCGCACACCAAGAATTTTAGGAGGGGTC

>RXA01765  
ATGAGCAACAACGTAAGTGAATATGAGTGCGCGGTTCGACGCCGACAACATTGTTCGAGTC  
GATATGCATGTGCACTTGGAAAGTCGACAGCTGCCGGACACAAATCGATGCCGGCAGACATC  
ATGGCGGCATCCTCGAAGTACTTTAAGACCGCGGAACGAACCTCCCTCAGCAGATGCCATT  
GCTGATATTTATAGGGAACACAAGATGGCGGCGGTGGTTTTCACCATCGATGCGCGGACC  
CAAATGGGGCATCTGCCGAACTCGATTGATGATTTGGTGCGAAGCTGTGCCCGCAACAAT  
GACGTGCTGATCCCTTTTGGCAGTGTGGATCCTCGTACCGGCGAGGACGCGCTGGTGGA  
GCTCGCCGACAGGTGGAAGAACTCGGGGTGCGAGGCTTCAAATTCATCCATCGGTTCAA  
GGATTCGACCCATCCGCGCCAGAGTTCTACCCACTGTGGGAATTGCTCGAAAGTTTGGGA  
TTGCCATGCGTGTTCATACCGGACAAAACGGCATGGGTGCGAGGTCTTCCAGGTGGTCCA  
GGCATTAAGCTGCGCTTCTCCAACCCAATGTTGCTTGATGATGTTGCGGCGGACTTCCCG  
AACCTGACCATCATCATGGCGCACCTTCTGTTTCTTGGCAGGATGAGGCTAACTCGATT  
GCCACCCACAAGGCCAATGTGTTTATTGATCTTTCCGGCTGGTTCGCCGAAGTATTTCCCA  
GAGTCTTTGGTCAGACAGTCCAATAACGTGCTATCCAAGAAGGTGCTGTTTGGCACGGAC  
TTCCCGCTGATTACCCAGAGAAATGGCTTGGCGCTTTTCGCGAATCTGCCACTGAAGGAT  
GAGGTTTCGTCCGGGAATCCTCAAAGACAATGCGGTGAAGGTACTTGGCCTAGCCGCTAGC  
ACTGAGCGCGGATCTCAAGCAGAAAAGGTGCTGCAACATGCG

>RXA01765-downstream  
TGATCCCATTTCAAGGTGCTGTTA

>RXA01767-upstream  
ACACCAGCCCTCCACAAGAGCGTCGAAGCAATCTACGCTTCGACGCTCTTTTTTTCACCTA  
CCTACTCATCCCCACATAAGAAAAAAGACGACACCACC

>RXA01767  
ATGATTGACCATAAACTGTGGTTTAAACACAGTAACCAACAACGCCTCTGTCCGAGAAGCT  
GCAGGAAAATGCGACATACCCATCAGAACGCTCAACGAGCAGCTTAACCGTCGAATACTC  
CCTGAAAAGACCGTCATCGCTCTAGCACGCGCTTATGATCTCTCACCTGTTGATGCGCTC  
GTTTCGACACCGGACACCTCACCGAAGAAGAGGCTGGTAGTCTGTAAGAAGATGCCAGCCCA  
GATTTCAGCTGACGACTACCTACCTGGGCACTGAACTCGCACCTTGACTATGGCATTCTC  
GGAGCTTTTGGCGACATCGCTGAAGAAGTAAACAGC

>RXA01768-upstream  
GACAACGAACACAACACCCAGATCCTGCACTGGTCCGGCGTTAATCGCTACCTCATGCAG  
GCACTCTCCCGTACTCATTCTAGAAAGGTTTTTCCCGTC

>RXA01768  
ATGTCTGAATCTACTTCTTCTGCTAACTCCACCACCATCCTCAACGACACCTTCAACCCG  
AAGCCTGGCGTACCTTATGCACGCGTCGATAATCTCGAATTTGCCACACGTGACGAATTC  
CGCGCTTGGGCTACCGCAGAGATGGAGGCCGTAACGTTATCTCTGCAACCATCGCCAAT  
GCCCCACGCGAAGACCGCATCAAGTCTTTTGTCTATGGATCTTGTTTCGAGACGGTATTGAC  
GACGCTGCTGAGGAAATCGTCTCACGCATTGATAGCGGTGACTTCACTATGAAGGAAGCT  
CTCACCGGATCGCGGCATCAATCAACGACCTCGATGCTGACGATGTAGTCAGCGACATC  
GTTGAAAACCACTTCAAC

>RXA01768-downstream  
TAGTCAACACACCAGCCCTCCAC

>RXA01769-upstream

CAGGACTAAACACCTGCTGCTGTTGAGCGCTTCTCACACATCATCCTCACAACCCCGTT  
GCAGCACCAGCATAAATCTATATTCGCTGTGACGGGGTTG

>RXA01769

TTGGGGCGCGCCCCACATTCACTCTTTTTCCTCGATTGGTTTCTACTACACACCCATGACC  
TCTATTACTACTACCGATACCCCGCTATATACAGCACTGCCCCATACCCGTATCTCTGAT  
GCGGAATTGTTGACACCAACAACAACGTGTGCACGAGATTCTCGTTTACGGACCGGCTGAG  
TGCCCAGGGTGTACAGCAACGCTTGACTTCTTTGCACGCAAAAACATGCCGGCCACCAAA  
GTCCTGTAGCTGCCGGTGATGTAGCACATACCTACATCACCCAAGACTTAGGTTATCTC  
CAAGCACCAGATTGTCACTGTCCGTATCAGTTCCCTCTGCTTCTAACCACGACAACGAACAC  
AACACCCAGATCCTGCACTGGTCCGGCGTTAATCGCTACCTCATGCAGGCACTCTCCCGT  
ACTCATTTT

>RXA01769-downstream

TAGAAAGGTTTTTCCCGTCATGT

>RXA01770-upstream

TGCTCATGACAGGTAATTCAACGCGTTACCCTGCTGCAGCATAAAAAGAACCTGCCTCAAC  
ACACCTCCACTTTTTCTACTTTTAAGAAAGCCACATTCTC

>RXA01770

ATGCCAATTATCATTGATAACCTCAATTCTGACGACGACTCCACCATCGGCACTGCCACC  
GAATACAACCTGACACTGACGCCGATTTACTTGATGCTATTAACGCTGATGCTGACCTT  
GATGGCGACGCCACCATCAGCACTAACGCGACAGAAGAAGGTGTAGACGCAGCAGCTGAA  
AAACCTAAGAAAAAGCGTAAAGCCCCCTGCTCTGAAGCCTAAAGGACTCACGGCAAAGTTC  
TTCCACCGTGATCTTACTGGCGTAGGTGGTAGGACCGGTCGCCTCAACAAGAACGTACAC  
CCGACCAACCCAGATCTGTCTTACCAGCCAGTCTCTGATGTCTACACCCCAATCAGCA  
GATCACAAAGGGTATTAAGACCCGCTACATCCTTACCCATCCAACCCCGCTGTTGTTCTC  
AGTGAGTCCATCAGCAACGCGTTTCTATGTCTCTACCCTGCGTCGCAACAATAATGTCAAC  
AACTCTGATTTCGGAATTGGCTGCCGTCGCGTACCTCTACCAACTCGATATTCCGCAGCTG  
GACCAGATGATTAATGTGCTGACATCTGTGATTACCATTTCCACGGATATAACCTGTGG  
GTGGATTTTACCCCGCAGACTATCGCTCTACGATCCGGTAAGACGGTACTCGATGACGGT  
ACCACCGCCTCTGATAACACCACTCATGTCTATTACCGCGTCACCGTTCACGTTATTGCC  
GGTCAAGATCATGGATCTACTCTGCTTGATGACCAGGGCAACCAGGTGCTTGATAGGGAT  
GATAATCCTATTTCTACCCCAAGTATCAAGCGTATTGGCGCTGTCACTGATCTTTTCGAT  
CACAATCCTTTTGGCTTCGCTAGTGTAACCTCTTTCGCATTTGTCGATTTCTCATGGGAC  
CCAGCCACCACCTTGGTTCGATATGCTCAACAACCTTGATTATATCTCTCTAATCACATC  
AATATTGCCAGCTCCCCAACCCCAATTGCCCTCGATATGGTTGTGCTCAATGAATGGTCT  
GAAAAGTCTTATCAGCTGTGCGAACGCGTTGTTGCACAGGCAAAGCTCATCAACAGCAAC  
AAGATCACCGCACATGTGAGTGATGTCATCAAGCAAAATGCCCAATATCTTGTGGTTT  
ACCGAACAGATGAACCTTGGCACCACCAACCTCAGCGAGGTACCTATCTCCAAGAAGTCT  
ATGCTGCCGATGTCTCGCCAGCTACGTATTTTGGAGCACTACGATGTACCACTGACCGCG  
TACTCTGCTCTTTTCTGGACTGTGACGCCATTAAGAATGAATCTATGGTGCAGTACCTT  
GTGCGACAGAATATGCAGCTCACCTTGAGCTCAAATCTGGATGCACTCAACTCCATTGTC  
TCCCAGCTCCCTGTACCAGATAAGGACGTTGTGGCTGCTTCTGGCTACCAGATTACGCCA  
CACTTCTCCACGCAGCAGCGTGAAGCAATCACCCTGATAATCCTCTCGCGATTATTTCAG  
GCCGGTGCTGGTACCGGTAAATCCACCGTGATTCTGGAACGCATTGAGTACTTGTGCGCT  
GCAGGCACCAACCTGAAGAGATTGCTGTGCTGTCTTTTACTAATGCTGCCGCCGATAAC  
ATCACAGCAAAAAATGACAAGGTGACCTCTATGACCATCTCCAAGATGGTTTCATGAGATT  
TACGCACACAATTTCCCTGATCATGAGATCTCCACCATCGACACCATTATCAATACGCTT  
GATATTGAATACGGCGATCAAATGGTGACCTCCGATTACATGATTCAGCTCCGTGACCTG  
CTCTATAAGGTCATGACGCAGGGTGGCAACGCCAACCTGACAGCGTTGAGCATCTTCATG  
GAATCCCATATCGAGGCGTTTCTCTCGGTGTGGATCAGATCAAGCAGACTTCTCTTGAG  
CTGGAAATCATCATCTACCTGCTCTTGGATAAGTGCATGAGCCTCATGCATCGCCG  
AAGTACCTCATTTATGATGAGGTGCAGGCAACTCGGTCTTCGAGTTTCGTCTTTGCACTT  
CGTTTTTGCGGCAAAGCACAAATACGAGTCTGTACTTGGTGGGTGACTCGTCAAGACCTTG  
TATGAGTTCCGTTCTGCTAACCCCTAAGGCTCTGAACTCCCTGGAAGCATCTGGTGTTC  
GGTACCTACCGTTTGACCACCAATTACCGTTCCAACCAGGAAATCTTGACTTCGCTAAT  
ATCCACCTCTCGGATATTGAAGCTAACAGTTCGCAGGTATTCAGCTCTACGCCAACTCT

TTTGATGCACCTACTGCGGACAGCTTCAAAGAAAAGGTTGAACTGGACATGCACCATGTG  
TCTAAGCAGTCTGAGTTTACCGACAGCATTCTTATTTTCATGGAGTCCAATAAAGCTCGC  
TTTGATGCTGCGATCTTGAACAATGAGCAAACCATTTGTGCTTGTCTATTCTGGTTCGTGAA  
ATTCGTGCAGCGCAGCAAGCGCTAGCCGAGATGTACCCAGCATCACGGTTCGTAACTTG  
CAGTCCGATAAGGGTTTCAACAACACGGTATTTTCGACCTTTATTAAGGATTCTGGTTT  
GAGGTCACCGCTGTAGACCCAGCTCATGCCGATTTACCTTTACCAGCCAAGTCACCGCT  
CATCTAGATAAGTTGGTACGCGAAAGCGTGAGCAGATGGAGGATCGCGTTATCCGGTCT  
ATGGCTGCATGGTGGCGTGAAAATGAGCGTGACATCCAGGGTTGGGTGCAGCAAACCTCAG  
TCCGGTGCATCACCAACGAAGAGTTCTTCTACCGTCTTCGTGAGTGCATTCTTGACTAT  
GAAATCAGGAATAACCGAGCACGTCAGTCCATGCTCAATGCGCGCAACAACGCTAACAAG  
GAGGCTGTGCGACAGGAGAAACCACTGCTCATGGTCTCCACCATTACAGTGCAGAAAGGGT  
CTGGAATTCGATAATGTCATCGTGTCTTCAAAAACCAAGCTCCGATGCAGAGATGACCGAA  
GAAGGTAAGCGCGCAACCTATGTGGCGCTGACCCGTGCAAAAAAGCGTGAATCATTTATT  
GCTGGTTCTACTCGCGCATACCCACGCATCGTACCGATTATGAGCAAATCGTTGATCTT  
CTTGAAGCTGAACAGGAGACGCGCGCCCTTGCTGCTGCTGAGGCGCAGGCTCAGGCGTTG  
TTGCTTGAGCACAACCCGTGGTTGCGTGATCTCAGCGATGAAGAAGTCACTGCTCTAACT  
GAGCAAGAGATCATCAACAATGTTGAGCCAGCCCTACAGATTGAAGAAGAGGAGGAAGAG  
GCTCGTGCACTCGCTGCAGCAGAGCCAGCAATTCAGCAGTACTTGTCTCAGTTTGCTTTC  
GATGAGTTCCCGGACGACGACAATGTAGCCAAACACTGTGCTACATGTAGCACACAGCCT  
ATTCTCCACCAGGCAGTGCCTGCAGATGTGACTGTACAATCAAGCACCGCCCCCGTAACA  
CCTGTTGTTGCGGATCTTGAGGTAACCACTGTTGCAGCTGATCCAGTCGAACCGACTATC  
GTTGCTGCACAGCCTGAGGTGGACGACAACCTTGTCTACAGCACGTCCACCCCTAATAGT  
CACAGTGACGTTATTGTCAGTGAATCTGATACCTCAGAAAACGCTGCTGTTAATCCAGTT  
CTGTCCGATATTGAGGCACTCCGAGCAATTTTCAACAACCAAGGAC

>RXA01770-downstream  
TAAACACCTGCTGCTGTTGAGC

>RXA01771-upstream  
TGCCCCGCTGTTGGTGGTTCCGGAGCGGCGATAATCGCTAAACGTTTGAGGTGATTGTAT  
GGGTATTTTCAGGTCGCGTTCGAGGATTTTGGGTGGAGC

>RXA01771  
ATGCACCAGCTGGCCAGCTCATCAATGATCCAGTCAGGGTCTGTGGCGCACTTCTGCC  
CTGCGCTCGCCGGTTGCTCGGGTTGGACATGCCGTGTTGCGCCAGCGTGCCGGTGAGATC  
TCGCGCATGCAAGGTCGTGAGTTTCTCGCCCTGGGGATCAGTTCCGACAGGTAGATTG  
CGCAGGCGACTGATTCAGGTCCATCCCCAATCAATTCCTACAGCGGATGCGATGGCCGTA  
ACCATCACCATGGCGCTCACCGCTGCCACGATTGATCCGGTGAAGTTCGTGCGGATTCA  
CAGAACCCGGATGAAGAGATTTATTTGGCAGCTCAGATCGCATTGCGGGAAATGGTTATC  
GCTATGCCTTTGGAGGATTTTCATCGGGGTGCGCATTGATCTAGAGCCTGTTTGGTGGCT  
GCTCAAGCTGCTGCGAAGAATGTGGGCGTGGAAGTCTCGTCAATCTTGCTGAAGGATCTG  
AATCTTCCCCAGGAGTACTCGGGAGCGTTGCAGGAATCGATCGTTGCGAAAATTCAAGCC  
GAAACTGATCTGGAACGTGCACGAAATGAAGTGAAACTACCCGTGCTCGACTTGCCAGC  
GCGAAAGTGTGAGGCAAAATCCGATTCTTGCCAAAATTCGGATGATTGAAGCGCTCCCA  
CCGGGATCCACAATTGAGGTTCCGGAGGGTGACTCAAAGGCA

>RXA01771-downstream  
TAAAGTTGCCCATTTCGGTGCCC  
GTTTGTACTGTTCAATGAGCATTTTGTGGAACAACCTTCGAGCACTG

>RXA01773-upstream  
TTTCAGCGAGATGGCGTTCGCTTTGATCATACG

>RXA01773  
ATGATCACCCACATTCAAGCCGGCCTGCATCTTGGTGGCTGCCGCGCAGCAGGTTTACTG  
CCTATACCAGCACATATTGATCATATTGTGCGCTGACAGCCGAGATTTCTATGACACC  
CAGTCAGCACCCGAGCTGCTCAGCAACACTGTGCTTGATGTATTGGACACCACCACTCAA  
GACTTGAAGGCATTGTGGCCTGTTGCAGAACATATTGCTACAACCATTCTGAATCTGAG

AACGTGCTTATCCACTGCCAGATGGGTATCAACCGCTCAGCTGCACTCATGACACGGGTG  
TTGATGTTGCGCAACGATTGCACCGCGGATGAAGCAATTGCACTGCTGCGTGATCGACGC  
TCACCGTTTGTACTGTTCAATGAGCATTTTGTGGAACAACCTCGAGCACTG

>RXA01773-downstream  
TAAGCGCTCAAAGACCCATTACC

>RXA01774-upstream  
CTGCGCAAGAAGAGAAAAACAACGACAGCGAAGCTGCGTTCCGGGCGAATCGGCGATAAT  
CACACACCACTCTTCCTGAGAGAATCCTGAGGTCATCACC

>RXA01774  
ATGTCACCGAACTTCCAAGCTCGCGGTACTACTGCGCCCACTGTTGCTTTGTCCATGCGC  
CAGATCGCGCACATCCGTGAAGAAATTAAGAAATCACCCTCGCTGCTTCCGTTTTCATC  
ACACCCACCACCAACAAATGGTTGTCCGAGATCTAGAATCACTGTTCCAGCAGCTCTAC  
CACACAGATCTACCTGAACCATCCATCAAAGACAGTGGTCTTATCAGTGCTATCGGCTCT  
AGCGCCGGCAATACCAATAATCCAGCACTCGCCCTAGAAACTCAGATGGCTTACCACCTG  
GTGCTTGCTATGCACCAACCGATGTTGCTACCTGGCACAAGGTGGTGACCAAAAACATC  
ACCGAATCTGCTGCTGCACAAGATGCTGCGGTGAGCAGAGTGCTAAAATACGATGCTGTG  
TACGATGCCGCACAACCTTATGGGCATCACTGTTGAGGAAGGTAATGTCGGTAGCATCGCT  
ATTGCCTTTAGCACAGCACGTGCAGACGGTAAATCTGATTGGTGTTTCCGGCATCAGC  
CGCTACATCGAGGTCACCGAAGCCTTGGATGCTGCGCGAGCTGTCACTAAAAATACTGAT  
GCGCTCAATAAAACTGCTCTACAGACGTGCAGCCGGCGCCGGTTGTGCATTCAGCACAG  
TTCATGAACAAGTCCGCACACGATCATGGGGTTAATACTGCGGAAAAAGATCAACCAACC  
TGTTTAAAGACTGTGCATTTACAACCACATCGTTACCCCCGAACAGGCTTTAAGGCTATT  
CAA

>RXA01775-upstream  
GTGGAAACCAAAGACGAGGAAAGTATGTCTATTTGTTTGTCCCCAGGTTGTCCACATTTG  
TTTTATTCCCCGAGAATGTCTTAGAAAGGAACTCGACCCC

>RXA01775  
ATGTCCTATTCACTCATTTATTTCTAAAGCACCAACCCCACTCCATGCCTTTTAATGAGGCT  
GAACTCCTAGAGCTTGTGATGAACCTGCACTCCGACAACACCGTGAAAAAGCCGGTTATT  
GTGCCACTCCCCGATGATTTCTCTACACCGTAGATAGCGCCGTGCGACTACATGATTTG  
GGTGTGACCAGGAACCTGACTGACTGGATTACTGCACAAGTTGCTGCAGCCTATCCAAAC  
CAGATCGTCTCAGAGATTGCTGCTGCCCCTGATCCGCAAGCCAAGACCTTATTCTCCGCC  
AATGCGTATAACACCAGGTCTTTTGGTACTTTTGGACTGAGCACCCCTATTACACAGCTC  
CAATACAAGCGCTGCTACCAAAATTGTCATCGAGAACGTTACGGGTGTCTATCATCCGTTA  
CCTGTTGATAACTACCGCTACGTACCCCCTGTACGCCCCCTATTGCCACAGCCGGTCTAC  
CACGAAGCTATCGCCTTAAATGAGTCTGATGTGCTGATCACGGTACTCGTGCAGCCAAG  
CACGCAATGATCAACCGCAACGTA

>RXA01775-downstream  
TAACCACACACGCCACAGATACT

>RXA01776-upstream  
CGTATAACCACACACGCCACAGATACTCAGCTATCTGTGGCGTGTGTTTTACATCAACC  
TCTCACCCATCCCCATCACTATTAAAGAAAAATCACCATC

>RXA01776  
ATGACCCCACTGATACCCCAGCCCCGTCACACGGCGTAACACCGAGTGAATTCGCTGTT  
ACCTCACACGAACCTCACACCTCACCAACACCTAGTCCGACACAGGTCGCTATTGCAGCC  
CAGGAAAAAATTCGCCAGCGCAAGCTCGAAGAGCTTAAAGCAAAAAAGCGCACAGACACG  
ACAGCTCAACCACTTCTACCTGCACCTGTGCTGCATACACGCCCCTCCCTCACCGAAT  
CCACCGCGACCATCTCCACCGGCACCTACCACTGGACACTGGGAACCTTCTTATTGTCAGG  
TCACAGCAGAAGAAAAATGACCGCAGCCAATCCCTTTCTCAAATTCTTCATCTCGGTAAA  
GCCTTCAACGTGAAAGACCTAGGGCTCACCTGCGATCGCACCACTGATGTTGACCTCTCA

CGGCTTGGCAAGCTCAATCCGCCCAGCTCACTTATCCTTGAAGTAGCAACGGCACTTGAC  
CTGCATCCATTCTCTCAGTCGCACCTCTCTTCGCACAGTGCGGTCAACGCCCCGTCGCAAC  
CAACTTGAATTAACCCCTGCACAACCATGACACTCAGGGCACAGCATTAGGTACAGCGTT  
ACTATGGTCCAGCTACCCGAGGTCAATTAATCGAGCTGCTGTAGAGCCCTATATCAAACCC  
AAGGGCTCGGGCAATGACCCGCTTGACCAAAGCCTGAACCACCGCGCACCCACCGTAAGT  
GACGTGCAAAAAGCCCTTGTGACGAGAAACACAGGCACGGCAACAGACAGCAACAACCTAC  
CTGCTTCCTTTTGATCCTGATCTCTGGTGCACCAAAAACACCGCGCTTAATGCGCCTAAT  
AAGGATCTCCTACAGGCCAGGCATGAGCTTGCCCTATATTCCCGAGATCCCCGCCATTGCA  
TCGTGGCTCGATCACCTTGACCCCATCATGCGTGTGCACCGTAGTCTTGCGCTTTCAATT  
TTCCAGTGACGCTTCTACGTGCTGCCGTTGAGAATCTCCCTCATAACGTAACCGATCTG  
CATAATCACCTTGATCCTGAGGATCTGCTCCCTGAGGAACCTACACCTGGCTCGATCAC  
CTCTTCGATGCAGACTTAACCGCTCTCGCTTCATGCCACAGCTTGACACCTATCGTG  
CGCAGCCACAATCACGCCAAAGCGATCGCAGCTATCACCGTGACCTCTGTCTATGGACGCT  
CTCATCGCCAAAACCTCTTGATGCGCATGACGATCCACTGCCCTCACTACCGGAGTTTGT  
GAACTACTGCGTGACGCTGTAGCCAGCTCGCAGCGCATTTTAAGCAGCAGCGCGGCGAG  
GTACTACCGCAGCCCAATGGCTTGCGATACGCCACCGACTTTGGCCTGCTCTCTTATATT  
GCCGATGGCTTACATGAATATGCACTTGCCATCGACTTCGGGCTGATCTACCCGAATGAA  
CTCATCACCGAG

>RXA01776-downstream  
TAAACCCACTCCTAGAAAGGTCT

>RXA01777-upstream  
CCGATGGCTTACATGAATATGCACTTGCCATCGACTTCGGGCTGATCTACCCGAATGAAC  
TCATCACCGAGTAAACCCACTCCTAGAAAGGTCTTTACCC

>RXA01777  
ATGTCTCGTATCATCACTGCTCCCGTCCACAAGCCTTATATTATTGCTCGTGAAGTCAAG  
GGGGTCTCCCATGTCCACGACACTGTTGGCGGGCAAGTGGCAGGCCACCTTGACACACTT  
AAACCGGGGGCCCTCTTGCGCGAAACCGTCACAGTTCACTGCGCCTAAATCCACGTCCATC  
TGGTTTATTGCGGTAGCAACCCACCCACGTAACCCACGGGCACGCAAAGGTACCCCTACTT  
GGTCGCGGTGGTCTTACGAACTCAAAGACACTGATCTGAACCTTTCTCACAGAGCGACAG  
GATTTGCTCGCCACATCTACCTCTCGTGACCCAGAGGATTGCCGTTTACGCTTTAATTTCG  
CGTCACGATGCAGCAGCATTTTTACATGCTAACGCCCGCCACATCAACAAGCTTTTTTCAT  
CCAGCACTAGGTCATGCTCGCTACGATCTCATAGATGTG

>RXA01777-downstream  
TAAGCACAACGCTTAGCTTATGA

>RXA01778-upstream  
CTACTACCCCTCCGGGTGTGGGTAGCTGTAACAACTACCCACAACTTTAGCCGGTCT  
TCCATACATAACTGCGAAATTGGTTAGAGTCTTTTTCATG

>RXA01778  
ATGCTCTACCAACACACCACACGCGGGCTGATCATTAGTGACGCGATCATCGCGAAAATC  
AGCCAAGTCAACCAACTGCTGCTACTAAGACCCACGCTGTTGCAAGACAAAGATATGCAC  
CATGCGACATTGAGTAGCGACACCCCATCAATTTCGAGTCGCCGTCGCTCCTATCGCGAG  
AATAAAGCCGCTATGCGACCACGAGCACCATCAGAAACCGTGAGACCTTTTTCAGCACA  
TCTGATATTGATTTTCGCCATACTCATGATTTCAGGACGTACAAGAATCTCTCGTATCTTTT  
GACCCACCTTGCGTCAAGATATGAAGCCAAGAACCAACGCAGTCATTTCTGCACTCAAT  
GAGCTACGCGAGCCACTGGATACCTTCTACCGTGCCCATGAATACGGTGACATCATCAGC  
GATGGTGCTTATGAGTTCGATCATGCTGCCATTGATGCACAACACAGCCTTAGTGAACCTC  
GTTGCCGGTCTGCATAATTATGACAACCTCATGTTTCCCCAGGAAACCGCTCCGTTGATG  
AGTGAATCCAATGGCATTCAGCTGGCTCAGTACTATAAGTCCACCAAACCTCGATGAGTCA  
CAATTGACGGTGGAACCTAATGAGCCTGGTATCAGCATTATGTGGCACGCCCATGATTTT  
ACCTGGTCTTGCCTAGTGCGCTATGACGACATGAACCGTTACCTGAGCATTTCAGCATT  
TCTTTTAAAGACATGCTGATCCCTGAACAGATCTATACCTTTCCACTTCACCCACCGTGAG  
GCAATGCAACTGCGCAAGGACTTTTAAATGCCATCGCTGCCTACAAGTCTCAGACATGG  
GGTGATGAGAACACTGATCTCACCAAGGCTGAACTCGAATTTGGTGGCACCTCCATGACC



TTCCGCGCCGGCCTCTCACAGCTTAGCGTCACCGGACCTCCTGATCACCGCCAGGTGTTC  
TGCTTGTCGTCTTCTGGTCGTGAGGATCACAAACACCCCGCCAAACATGCGAGACGGACAT  
GTCATTGATATTGCGGTTACTCAATTGTCCACCCTGCGTAACCTCATTCGGGTACTGTGC  
ACCACTCACCCGGATCATTCACCAGCACTGCTACCTTATGGTCAGCAGTACACCATC

>RXA01778-downstream  
TAACATGCTCTAACTCGACCCCG

>RXA01779-upstream  
TTAGTATTTAGTCAATTAGCCAACTACGATAAAACTAGTGAATAAACATACTAGTTCACT  
TTGTGCGCTTAAAACTAGAAAGTAATATAAAAAACTC

>RXA01779  
ATGCGTTATACTCCCCGTACCCACCGCGCACTCGGACTTGCTGCACTTACCGCTACAGCT  
CTCCTACTGAGCTCATGCTCGACCACCGCTGACCTTCTCGGCGCCGATTCTGTGGCGCAG  
GCTGTCAACCGATGGTGGCTCTGCCCTTGATCCCACTGCAGCTCATGTGCTCACCATCACC  
AATGCCACTGCAATGACTCTTGCTGAGCTACCAGAAAACACCGACCCTGACGCAGCCAAT  
AACACGGAGCCAACAATGGCCCAAAGCGCCCTCAAGCGTATTTACGGTCTCGAAATTGCC  
GCCGATGGCACTCTGATTGCTGTGCGAGCGCCATTAACCTCGCGAAATAGTGGTTCTGAG  
CAGCCTACTGTGCGAGCAATGGCTGATCCAGAAAACAATGCTGAACTCACCACAGCACAT  
ATTCTTGAGATCGACCCAGCCACAGGAAGTCCACACCACGTCAAGATATTGCTCTGACT  
GAAGATTTTCAGACCATGGCTAGCTCTTTTAGCCAGATCCGTAATGGCTGGGGTACTACC  
CAACTCATCGGACAACACCCTGATGATCCCAAGCAACCTATTCGTTTCAGCTGATACCTGG  
ACTGTCAACGGCTCCACTCAGATCACCGGCTTTAACACCAACACCCCAACGGGAACCGAA  
GATGCTGCCTACACCATGCCGGCGACTGAGCCAGCTGTGGGACTGTGCGCTCTAGAATCA  
GGCTCCGATGCACCACTGGATGAACACCGTGAGCTCAGCACCAGTGCATTGCGTACCGCA  
TCAGTATTGTGCGAGCTCTGGATCTGCCACCCTCAAGCTGCATGATCCTATGGTCATGTCT  
GCTACTGGCATTGTCCAAGCAGCGCCTATGTGCGATGGCGAAGTCATTAACCAGCACGAG  
ATTGGCGATCTCCGCGAGCAGCTCGGTATCACCATCGAAGAATCTGAGGCTGCTCAAGCA  
GAATCGGATGCCCCAAGCAGCCACCGATCACCCACTGCAGCCCTGGGCTTAAGCAACCCC  
ACCAGCTCAGCGTTGGTTCCAGGTCTTGCTGAGCTTGATTGTCTCAGTGCTGACCAGGCT  
GCCACCTGGCATAACCGCGACACCAGCATTTGGCACCGGTAAGCCCAGCGTGCTTGCTGTC  
ATCAACGCGGAAAATGGCCGATGACTTTACCCTGCAGCTGTTGAGCTCAGGTGCCACCACT  
GCCGAAACGCAGCTTGCCAGCTGCCGGATGAAACCGCGTTCGTGCTCATTGACCCATCA  
TCTGGTGCTGTTACTGACCTGTTCTTTATCCAAAGTCTCAACACTGATCTGCCGGCACCA  
ACAACCCAGATTAATTCTATTGCTGTTGATGAGCGCGACCCCAACATCATCTACGCCACT  
TTTAGCGGCGATGACCACCTGTACCAAATGATGCTGGGT

>RXA01779-downstream  
TAGTTACACAACCTAACTAACCAG

>RXA01780-upstream  
CCACTTTTAGCGGCGATGACCACCTGTACCAAATGATGCTGGGTAGTTACACAACCTAAC  
TAACCAGGCACCAACATTTTCTTAAAGAAACACCCCTTATC

>RXA01780  
ATGACTTTTCTCCACCCCAAGGCTGCGTTCTACCCTCTCACCATGGATCATCTTACCGAT  
CTCGGTCTTGATCCTGAGCAACTCATTAATGAGTTGCCGACGATTACCTACGACGTTCAA  
CCACACAATGTCTTTGTTCTACAGTTCAGCACCGCCGATGTGCGCGTCTACCAGGAAGGT  
AATACCCTTTTTATCCGCACTGCTGAATTAATCAACCCTGAACTACGACAACGACAGCGC  
ACACAGTCAACGACGATCTCAACAACCCCTGCTTCACTTCGCGTCTGTGATGAGATCAGT  
GGCCGCAAGCACCGTGTTCCTCAAAGACAAAAGTGTGTCACTCACGATCACGGGACCAAT  
TGCTGTGATTCCGCA

>RXA01780-downstream  
TAATCCTGATGAAGCCAGCGCCA

>RXA01781-upstream

CGACAGCGCACACAGCTCAACGACGATCTCAACAACCCCTGCTTCACTTCGCGTCTGTGAT  
GAGATCAGTGGCCGAGCACCGTGTTCCTCAAAGACAAAA

>RXA01781

GTGTTGCTCACTCACGATCACGGGACCAATTGCTGTGATTCCGCATAATCCTGATGAAGCC  
AGCGCCAAGGCTGTCGCTACCAAACATAAGCACACCTTGTCCGGCGCTACCTCTGATCAC  
CCTTATGCCCGCATGACGCTTAAAGACATGATTGAACAGGGCTTTACGCTCACACCGCTG  
GAATTCCTCGCTCTGTGCTGTCGATGATCCAACAGATTCTGATCGCACCATGCACGTGATC  
AATGTTTCGCGAGCACAGTATG

>RXA01781-downstream

TAGATTCTAAAGTGCGGTACAAC

>RXA01782-upstream

ACGTGATCAATGTTTCGCGAGCACAGTATGTAGATTCTAAAGTGCGGTACAACCTGTACCG  
CCCACACAATTCCACCCCTTAAAGAAAAGGACTTAGCCATC

>RXA01782

ATGACCACCTTCGCCCTTATTGCTAGCCCCAACAAATGTTGATCCCACTGCTGAGTCCCCA  
CTCGCCATTGAAATCCATACCGATGAGGACAGCAGCTATCCACTAGGGCTTATTGACTCA  
GACCACCTGGTTTCTGCTGTGATTTACGGCGATATGGTGATCTACACCAAAACACTGCTC  
GCACAGACCCCAACAGATGATGTGTCCACTGCTAGCGCCTTCTTCGACAAACTCACCGCA  
CTTGACGCTCAGGGTCGCACCCGTGATCTGGTCTACAGCGCCACCTACAGCCAACCTGTT  
ATTGCCGGCCACAACCGCACTGTATTAAGTACGACTCAGAGTTCTACGATGAGTTTAC  
CAGGTTATTGAGGCTGCTCCTGGGGTGATCTTGAAA

>RXA01782-downstream

TGATGTTTATCGGGCAACACCTC

>RXA01783-upstream

ACCAGGTTATTGAGGCTGCTCCTGGGGTGATCTTGAAATGATGTTTATCGGGCAACACCT  
CACACTTAGGCTAGGTCTCTAACATGAAGCAGATAGCGCC

>RXA01783

ATGATCAATCTTTTTGCTGCAGCCCTCCCCGATTCGAGCCTTTGAGTATTACCTCCATA  
CTCGTGCTCGGTGCTGTGGCATTGATCTGTGGCCTCCCTGTTTCTCGCACTGGAAAAA  
AGCGCTGAGCTCGATGATCTCTTCGCAGCACTCATCATCGCTGTACTTTTAGGTTTTGCT  
GCTTATACGTTGTGCTCCCCAAGCTCGTTGAATTGGGCTGTACTATTTGCCAGCTC

>RXA01783-downstream

TGACTAGCGACACTTACACTTTC

>RXA01785-upstream

GACCCTGGCCCAACTTTGCAACAGCACCATCCACAGTGATGGCACTACCAATACTGAGCC  
TGACTACGCATCTAAGGCGGCGCACATTAGTGATGCAACT

>RXA01785

GTGGATCAGTTCGTTGAGTTCGGCGGTGGACAAGCAAACATTAACCCTGATGGATCAGCG  
ACCGTTGATTGGGAGGGTTCTTTACAGCATCAACTTCTACGATGGTTTGGTGCCGTTTACC  
ATCACGAATCCGCACCTCGAGGTTTCTGTAGCTGGTACTGGTGTTTTACTGGTGACCTC  
ACTAGCTATGCAGTGGAGATGTGCAACCCGAATGAGAAAACCCCGTTGACTGACTTGTAT  
GAGGATGTCACGATCACAACGTTTGGGGGAGTGAACCTTGATCCTGAAGGTGTTGTGACA  
AGCAATCCTGATTATGACGGAGTGATTGTTGATGTCCCACTGGATGCCACCTCTCAGGTT  
ACTTCCGGTGCAGGTTGGGGAGCGTGGCCGAGGGCTTCCTTGATTTCCTACTTTGATACC  
AAGTTGCCTTCCTACTTGGTATTCTCAGATGGCGCAGGTGATCCTAAGAAGGCGCCTATG  
AGCTTTAATGTTGATTTCACTAATGGTCCAGGTCTGGTGAACAGCCAATTGCTCCACAGG  
CAAGTGATCTCAATGCCGGAACCAAGGCAGTCTCG

>RXA01785-downstream  
TAGTTCCATCGGAGGCAGAAGCT

>RXA01787  
ACCGAGAAAATTGATAAAGCTCAACCACCTGTCGATCAACTCGGGAGTTTTCTCCATGGC  
CTAGAGACCTCTGTGCGAGATTTGGGGGTTGGTGATCGCGTATTTTGGCCACGTTTTAGC  
ACCTTTGATAAGAACTCGGTCGCTACCGCATCCACACTGTTCTCGGATTCGCTGAGAAC  
GATCCGTTTAACCTTATGACCAGCAGCGAGCGATTTAAAGGTAAGCCCTATGTCGATATG  
TTCGACAATCAAGACAACGCCTTTAACCCTAATTCCTATATCACTACAGATACCGTGCGC  
ATCGTTGTGCGATCCTGTACCGGAACTAATCCCGACGATGAGAAAGCAGGACGC

>RXA01787-downstream  
TAGCCATGTCTCGCAGCTACCCC

>RXA01788-upstream  
CCTTTAACCCTAATTCCTATATCACTACAGATACCGTGCGCATCGTTGTGCGATCCTGTAC  
CGGAACTAATCCCGACGATGAGAAAGCAGGACGCTAGCC

>RXA01788  
ATGTCTCGCAGCTACCCCATCTACATCATTCTTTTGGCCCCAGCGGATGATCTCCACGGC  
GTTGGAGGATTCGAGTGGGTTCCAGCATCAACACCAGAAAAACAAAGCTGCCGCCTTCACG  
ACCTTTGATCGTCAATTTCGATGATTCTCGTAACAATGGTGGCTCGCATATTGTGCGTCTA  
CTCAATATCTCTGATCCCAATATCACAGCGGATATGACCCAAGACGATATTACCGCGTAC  
CTCGACTCAAACATCGACCGCTGGGAATCCACGGAACATGCGCTCAAGCAGTTTGTCCCA  
CTTAACGCGGGTGCTGATCGCGTACCTACCGGTGGTGCCGACGAGCACATTACCCACGCC  
TGCCGCATAATAACTGTGCGAGCTAGCTGCACACGGATTCACCTGCGCTGTGGATGCATC  
CCAACACCACAACACCGCCCC

>RXA01788-downstream  
TAGTGCCATAAATGCTAGGGGTG

>RXA01789-upstream  
TGCATCCCAACACCACAACACCGCCCCTAGTGCCATAAATGCTAGGGGTGTTTTTTTCAT  
ACCCACAACACCGTTCTTCTCTAGAAAGAGACTCGATACT

>RXA01789  
ATGCCTCATAACCCCATCGAACTTCACACTAATGATGTACTCGATGCTCTCGACATTGAC  
GCCATCTGCGACGATGTGTTTCTCTACACCGACTTCGAGCACACCCCAGGTCAGCTTGAT  
CGCTTCGAGCAACTCGCCTTCACAAAAATCTACGACATGCTGGAAACAGCTGCTGAAAAA  
TTCCCAGATGTAGCAATTAATGACACTTTAAGCACTGGCAACCACGCTGCTGAACAGTAC  
TTTCTTGCCAAATCCCGGAACATCATCGTGCTGACCAGCTTCGCGCTCAATCAGACCGAT  
CTCCGCGACCTCATAATCTCACCGTGCAATTAAGTACACAGCACATGCACGAGCACTCATG  
CGTGCGGTGACACGAACATTGTGCACTGCAAAACACCCTGTAGAACGCGCGACTATCTTC  
CCTGTGTCTGTGCTAATGCCTTAAGCATCGAAGCGCTGTGTTCCGAATATCATGCGTTC  
CGCACCAAGCAGGTGCTCAACACTGCTGCACTCATCAATCCTGATAACACTCTTATACCC  
ATGTTGTTGAGCAAAGCGTATGAGGCATACGCTGGCACAAGGGTGTGCAATCCGCGCAA  
CGAGGTAGCAACCTAGCTCGTGAGTACTACGCAGGACTTATC

>RXA01789-downstream  
TGAAAATTCACTACTCAACTCTG

>RXA01790-upstream  
GAAAGGCTCGAACACCCATGATCGTTGAGGTAGCTCCGAGACCGAAGAGATCAGCCTCAT  
TGATGATGATTCCCCTGATCTCGATGAGGACGATAACACC

>RXA01790  
GTGCTCATCGCCGAAGACATCCGTGATATGGATGACTATGGCGAAGATCATCCTGATCTT

>RXA01790-downstream  
TAAAGCTCACTGTTAAGCCCGCA

>RXA01791-upstream  
CCGCCTGTGCAACTAACCCTGTTGTGCAGGCGGTTTTCTCTATCTACACCAACAACCTCCA  
CAACACTATCCGGTCCAAATCTAGAAAAGAGACAACCCCC

>RXA01791  
ATGACCTCCCCACCACGTTAAAGCCCTGGTCTATTTCGCGGACCCATCGACGGTGAATAC  
ACCATGCTTGAGGCATATCCGTTTCAGTATGTAGCAAATACTCGCCCGGCCATCATGCTC  
TACGCACTCGATGAAAACGGTGTACCGGAACAATATGCCGACCTCACCATCAACCTTGCC  
GATGTGGAGCTCAAGCAACTTAACCACGTCATCATTAAACCCAGATCTGCACGCTGATGTT  
ACCGAACTGTGCATTAGCGCCGCGCTGCTGCGACCTGGTGTCTGGGCCAGCACCAGTC  
GGTAGCACCACCGCCAAGGTCTACCGACTCACTGAGCGTGCTGATGGCTGGCTACAGCTG  
TTT

>RXA01791-downstream  
TAGCAGCTACCTGCGCCTAATCC

>RXA01792-upstream  
GACTCACTGAGCGTGCTGATGGCTGGCTACAGCTGTTTTAGCAGCTACCTGCGCCTAATC  
CCCCACCCATACTCACTCCAAAACAAGAAAGTAGTCATC

>RXA01792  
ATGCCTCAGTACACCATCACAATCACCGACGAGCAGAAAGCTGTTCTACACAGCCTCACC  
AACCCCCATATCGCCACTGCTGAACACGGCGCTATCACCGCAATCGAGATTCATGACGAC  
CAGGATGTTGTTGCTCTATCACGTTCAACCAGACGGCACACTAACTTACGAGCGCCTTGTT  
GAAGGCTTCCATTACGGCTGGACACGTTTTTGACAGCGAAGGTTTTGAGATCGACTCCGAC  
AATAACCGCGTTGTAGACGGACTCCGCGACGAA

>RXA01792-downstream  
TAGTTAACAACAACGACCGCACA

>RXA01793-upstream  
CCTTCTCTGCAGGCTACGCACTGCTGCGCCTAGTTTCGACGCTGCGCCGACTTTTGCAGC  
GCCACTAAACACCCAAACACAACAAGAAAGAAACACCACT

>RXA01793  
ATGGCACAATACCGCGTCAGTTTTATCGCGCTCGCCGAGTCAACCATCGAGGTGGAAGCA  
GACAGTCCTGAAGAAGCACTCGACCTAGCCAATGCAGAATTTGACTACCCGGTCACCTTG  
GCCGGCGATCCCTATGAGCTGCACGACTGGGAAGCACGCGCTGAAATTGAATGGCTCGAT  
ACCAGCTCGACCCCGCAGCAACGCCTTGGAGAACATGTCGTCAAGATCGAAGAT

>RXA01793-downstream  
TAAACTCGATCATTAACACACT

>RXA01794-upstream  
ATACCAGCTCGACCCCGCAGCAACGCCTTGGAGAACATGTCGTCAAGATCGAAGATTAAA  
CTCGATCATTAACACACTCTTAAGATAAGGACACTAATT

>RXA01794  
ATGGCAACCCACCGGTTCAATTTTGTGCGCAACCGCATCCGCCTACATCGACGTTGAGGCA  
GATTCCTCCCGAAGATGCTATAGAAAAAGCGTATGATCTCGCCGGTGATCTGCCCCGCCCTC  
ATCGCCGACAACGAATTTGATCTCGGTGAATGGGAGGTACAGGCCGATGTCCAGTGGCCT  
GATAACTCTGTACCTCGCGAGCAACGCCTTGAAGAGGGCGTTGACCTGCTCGAT

>RXA01794-downstream  
TAAACAGAATTAAC TCAAACCCC

>RXA01796  
TTTTACTGTCCGTCAGACCAAGATGCTTATGTTGACTTGACTTTGTTTCGATCAGATGCGT  
CAGTTCGGTGCAGAAAACGCCCCGCTTGCCAGATGTACATCGTGGCGCACGAGTACGGC  
CACCACGTCCAAAACCTCGAGGGCACACTCGGACTGTCCAATTACAACGATCCGGGGCGT  
GATTCGAACGCCGTCAAGATCGAGTTGCAGGCCGATTGCTACGCAGGCATTTGGGCTAAT  
CACTCCAGCGAAGGCCCGGATCCGCTACTCCAACCCATCACCGAATCTGAGCTAGATTCC  
GCTCTCCTTGCTGCAAGCGCCGTGGGCGACGACAATATCCAGCAACGATCCGGTGGCGAT  
GTCAATCCTGAAAGCTGGACTCACGGCTCATCGCAGCAGCGCAAAGACGCGTTCCTCGCC  
GGCTACAACACCGGCCAGATGAGCGCCTGCGACTTCCTCGGCCGGGGCGTCTACAACGAC  
GCT

>RXA01796-downstream  
TAAAGCATTGCTTTTCGACGTCT

>RXA01799-upstream  
TATTTTGGGCATGCAC TCGTCATATCTTCACAGACGTATGGTTTTGTAACAACCTCCCC  
AAAATCCCCATAGTTTCCCCCGGTGCATATCCTTAAAGGT

>RXA01799  
ATGGAAATTCCGCTGCCACATCCCTTATCGATGTCACTGATGGTGCCCTCGGCCAA  
ACCTGCATTGATCAGGCATTTGCTGCCCAATTGGGGCGAGTTACTGGAGTCGAATTCAAC  
CTTTCTGACGATAAAACCGCGGCTGAAGTGAGGATCAATAAGGCGTCGGGGAGTCCTTTT  
GATACCACCGGTGAAGTCATTGCGTGGATTAATAATCAGGAATTTGAGTGGGTGAGCAG  
CGCGGTGAGGATTTGGGACTGCCTGAATTGCAGGGCATTCAGCCGCTCGACGATGATCTG  
ATCACCGCCGCACGCACGCTGTATAGCAATGCGCCGGCGTTTCATCGCCCCGTTGCGCGAT  
GGTCGCAGGGCGTTGGTTGCGATCAATCACACGCCAAAAC TGGTTGGTATCCGTCGCACG  
CTCATCGAAGGCC TGCAGGCGCTGAAGCCTGGAAC TGAAC TCAAACGGGCATTGACTTCA  
TTTGCTGCATTCTGCGAAC TGGGCATCCGATTGATGACAACCGCATCTCCTTCAGCGAT  
GGCACCTCGCTGTTGCTTCGTGGCGGCAAGTCATCGAAATCGCAGGCGGGCTGAGCTTG  
CGCGACGTACGCGCGGATGCGGCGTTTCATGTCCGCTGAGCATCAATTGCTTTTCGACGCC  
ATCTCCTCGTCTCACAACGTACCTTTGACCCACACACCAACGTGGCGACCGTGGCAAAC  
GAACACCAAGTTCACGCCATCCCCCTTGCTGTTATCGACGGCACGCGTTGGGTATGGACA  
TGGTCTTTAAAAGAACTCAATGGTCAAGCAACTGAAGGCCTTGCCCGCTTTGGTTTCGAT  
AACGGCCTACTACTGCTCACC AATGCAGAGATCCTTGCTGAGGAAGCCACCGCATTC AAC  
CTGATTGATGTGGCTAAACAGGTGCTCAACACTTGAGCGCACACCATCGTGCAGCAACCT  
GATGGCACCGGAATTGTCCTGCTGCTGGATCATCCTCGGCTGCAGCTTCCGCCAGCATCA  
CATGAGCTGTTGAGGCCACGCTGTATCACCAGCTACCAGGCGATATTGATGCCCGCCG  
CGGGTGGCGTCTTATGCAGCTCACCAGACGCTTCCTTTTGATGGCTACGCACTACCGTT  
GAGGGCCAACAAGTCGGCGTGACTTTTGACGGCGAGCATTTAACAAGGTGGGC

>RXA01799-downstream  
TAGTTTCTAGCAAAACCCAACC

>RXA01800-upstream  
CCAGCGCAGTT CATAAAACCGCCAAACTTTTGATAGCGTAGCAATGGCCCTTTCGGTGGA  
TGGGGCCATGTTTGCAATGCTTGAAGAAGGGTAGGGCA

>RXA01800  
GTGAAGCCGCTGGGCAAGATCGCCGTTCTTGACTTGGTACCTGGGAATTGTTGGGGTC  
ATCATATTTGATGTGGTGGCAGCAATAACGATGCTCACCCTCGTGCCCAACAAAATGCC  
GAAAGAGTCAACAGTGGGCTTGTCGCGCTGGGTGGATCGTATGCACCCCCGATGAGCCGG  
GAAACACTCATTTGCCAGAGTCATTGCCGGTGCAGTGCTGGTTCTGGTGATTTCTTTAGGT  
ATTTTCGTGCTGATTTCCGCGCAGTCCAAGAACC TCGCTCCGATCACCCGGATGCATCT  
GCCATT CAGATTGCTCGGCGTTGGGCGTTTTTGAACAATATTCAAAGCTGTATCGGCTGG  
TTTAGTTTCTTCTCGCAGCGATTTTGAGCATCTCATCGCTAAGACTCAACGGCCAGGT

GCCACCACGCATCTTGAGATGGCCGTTTACATCATCGCTGTGTCGGTGTGTTGGCTTGGGCG  
TTGATGATTTCTTGCGACGCGGCCAGGTGGCGATTGATCGTGCCATTCCAATTCGGGAA  
GATGATTCGGAAGTGAATGGGGCATGATCTACCACGATGCTTCAGACAAACGAGTTTTC  
GTGGAAGTTCGATGATGGCCACACGACCGTCATCAACATGGCGCGCGGGGAGCGTGGCTG  
CTCATCGCAGTGATGGTGTGCTGCGCTGGCCATCGTCGGTGGGTTTTGCTAGAAAAC

>RXA01800-downstream  
TAGCCACCTTTGTTAAATGCTC

>RXA01803-upstream  
CTAGCGGAAAGGCTTTAGCGACAAGGCTTTTTCATGTTTAAATGCAGGGAATATTAAC  
TTTTGTTAATCTCTGACCATTGACCTTGACGCTTAAAAC

>RXA01803  
ATGCGAAAGAAAAAGACGGTCAAAATCTCCAGACTTCCGAAAAATCCGCCAAAGCTG  
GATAAAAAGGCTTATGAAAAAGAACTAAAAAGACTTCAAGCCGAATTCGTGATTTGCAA  
CAATGGGTGTGGAACCGGTGCGCGCGTGGTCATCGTCATGGAAGGCCGCGACGCCGCT  
GGTAAAGGTTCTGCGATCAAGCGCATACGCGAGTACCTCAACCCCGGTCCGCAAGGATC  
GAAGCGCTGCCCCACCCCAAACTCTCGGGAAAAAGGGCAGTGGTATTTCCAGCGCTACATC  
GAAAAATTGCCGACTGCTGGTGAGATCGTTATCTTTGACCGCTCCTGGTACAACCGTGCA  
GGAGTCGAGCGCGTCATGGGATTTTGACCTCCAGGAGTACCGCCGATTTCCTTACCAG  
GCACCAATCTTTGAACGCTGTTGGTGGAAGATGGCATTACCTGCGTAAATACTGGTTC  
TCTGTATCTGATGAAGAGCAGATTGAGCGTTTTCGAAGACCGCTGAGCGATCCGCTGCGC  
CGGTGGAAGTTGTGCGCAATGGATTTACAATCGATCACCCGCTGGGAAGATTACTCACGC  
GCAAAAGATGAGATGTTTATCCACACGGACATCCCGTCAGCACCGTGGTACACGGTGGAA  
TCTGAGGACAAGAAGCGTTCCCGCATCAACGTCATTTTCGCATCTGCTCTCGACGATTCTT  
TATGAGAAGATCGATCGTCCATTGCGCGAAATCCCTCATCGCCAGATTCTGAATCTGAT  
TATGTACGTCCCCCTCGCGATGAGTTCGGTTATGTTCCAGATGTGGCAGCACACTTGGAA  
GAAGAGCGCATCAAGAAAGAAAGAAAGCCAAAGAGCCAGCTAAGGCTGCA  
GGAAAGAACTCGGATAAGCAGAAGTCTTCCGGAGGAAAAGGCAAGAAGAAGTCCAAGAAA

>RXA01803-downstream  
TAGAACGCCTTTTAAGGGGTGA

>RXA01804-upstream  
AGTGGGACCGCATGGCAGAGTTCGCAGTCAACTAAAATATGACCTTTGCTGGTTGGCTAA  
TTTTGGGTCAAAGTTTGTGAAACGAAGTAAGCTTAAGTT

>RXA01804  
ATGCATATCGTCAACATTCGCTTCAAGCCCCAAGGCTAAGTACGTGGATACATTCCGCTAC  
ACAGTCGACAAATTCAGTCAAGCAGGACAGAGGAAGGCTGTCTCTACTTTGATTGG  
TTCCGCAACACCGATTACCCAGGCGAGTACCTTGTAATTGGTGTGTGGACGGATGAAGGT  
GCGACGGAACATAAGAAGAGCGAGCACTTCTTGCAGCTCAAGAAACACTTCCACCGTTG  
CTGCAACAACTCCAATGATTATTCAGAGTGAGTTTTCGAAGAAGGGTTGGGAACGT  
TTCAGCGATTTCACCGTCTAC

>RXA01804-downstream  
TAAGGAGCCCGCAAAGCTTTGT

>RXA01805-upstream  
GGCATTGTGAGCGAACTCATGGTTTAACTCCCTTCATGAAATGTGTGCGGGGTCACTGG  
TTCCCAGCCTAGTCTGAACCTGGCTAAACAAGATCGGTACA

>RXA01805  
GTGGTGGTCGTGATTTTGATTAAATGTGAAATTCAGCCATTGCCAGAATATGTAGACACC  
TTCCGCGAGCAGGTAGCGGAGTTTACAGAAAAAGCCGTGCGGAAGAAGGAAACATCTTC  
TTTCGATTGGTCAATTAACACCGACAACCCAAACGAGTTTCATCTCATCGAAGCATTCCAG  
GACGACGCTGCCGAAGCTCACGTCAACAGCGACCACTTCAAGGCGGCCTGTGAGCTGTTT

CCAACCATCCTGTCTGAGACCCAGAGATCATCAACACCCTTATCGAGGGCAAGACTGAG  
TGGGACCGCATGGCAGAGTTCGCAGTCAAC

>RXA01805-downstream  
TAAATATGACCTTTGCTGGTTG

>RXA01806-upstream  
AATCAAAATCAGACCACCACTGTACCGATCTTGTTTAGCCAGTTCAGACTAGGCTGGGA  
ACCAAGTGACCCCGCACACATTTTCATGAAGGGAGTTAAACC

>RXA01806  
ATGAGTTCGCTCGACAATGCCCCGCTGCTGGAATTGGATGTTTCAGGAATGGGTAAACCAC  
GAAGGCTTGAGCAATGAGGACCTGCGCGGCAAGGTTGTGGTGGTGGAGGTGTTTCAGATG  
CTATGCCCTGGATGCGTGAATCACGGTGTCCCTCAGGCTCAAAAAATCCACCGCATGATT  
GATGAATCCCAAGTGCAAGTCATCGGGCTGCACAGCGTGTTCAGCACCATGATGTGATG  
ACACCTGAGGCTTTGAAAGTGTTTCATCGATGAGTTTGGGATCAAGTTCCCCGTGGCAGTG  
GATATGCCGAGGGAAGGCCAGCGGATTCCTTCGACGATGAAAAAGTATCGTTTGAAGGA  
ACGCCCAGCATCATTTTGGCTGATCGAAAAGGACGGATTCGTCAGGTGCAGTTCGGGCAG  
GTTGATGATTTTCGTGCTGGGATTGCTGCTCGGCAGTTTGTGTCAGAGACGGACGAAACC

>RXA01806-downstream  
TAAAGCGCTTTGGTCTGCAGGCC

>RXA01809  
CACATAAGGCATGAGCAGGCTATGCGAGATGGACACCAGGATCTCAGCGTCTTTGTCCGT  
GCTGATGGGGCGATCATGCTGGAAGAACTTAAAAATCGTTACCAGCGCCACCGGAGAAC  
GAGCCCCATGATGATGATGTCACCGAAATGATAAAGACCACCGAGGAAACAGAGAAGGAG  
AACGTAGAGATGGATCAGGATATAGCTGTAGTAGACAACGTTGATGAACAGGTGTGGTG  
ACACCTGCTCATGACGCTGACAGCGTAGCGGTTGTTGCTGAACAGGTCGTTGCGTCAGAA  
CCAAGCCAGAGCCCGGTACCCAAGGTTGAGCACGTTAGAGATGAGTGTGATCTAGCGGT  
GAGACTATTACACCGATTGATCAGGCAATTCGGTCTTTTATGCAGCTCAACGGTATTGAG  
CACAGCGTGGTGTTCGACGCTTGGGGCTGATGACTCAGGTGGCACATAATAAGGAACTT  
GATGAGGTCTACGCTAAGGCACTTGCCGAGGGTGAATCCCATGCTCAGCAGCAGCATGAA  
TTAGAAGCAGAAAATGAACGGCTTAAAAAAGAAGTTGATGCGCTCGCTGCAGAGCTTAGT  
GCTGCGTTGATGGGCGAGGGTGGTGGTGATCATGAC

>RXA01809-downstream  
TAAGGCCGTGACACCAATTGTGG

>RXA01812  
AGCTTCAATGACGTTGACCCAGCGGTGACCCATCCGCATCTCACAGTGATCTACCCACCG  
CTCACCCCTGCATCCGAAGAGAAATTCAACAAGATCACCTCAGTCGCTGCTGTGAGCAAG  
CGCCCAACCACCTGCCGTATTTCCGTGCAGATGGTTCACCTACTCGTGCGCTTTGCTAAC  
TTCTCCACAGGAGGTATTCACGGTGCGGAATACAACGAAGATCGTTTTGACCATGATCAA  
GATCTACACACAGTGGCAACCCGTGAATTCTTCGCCATTCTTGATGCGACATTAGCGGCT  
CTCTACGCAGCCACCAAGCCGAACCTGAATCGGCGGACTACCAGATTGCACAAGACGCA  
CTCGCCTGGGCAAAGAATGTACTTAGCGATCAAAAACCTCATCGCTAAGTCGCCTCAGTTA  
TACAACCCCGAAACCGGGTCACTTATGAGTGGGAGTTTGTGCTCAAGCAGCATGGTGG  
ATTCGCAACAAACCGGTTGAGGTTATTTTACCAACAGGTGAATCAATGACCGTAAACAC  
AAATCTGTATTGGCATCTGCGTCTACCCACTCCGAGACAACGTGGCGTACTGGCGTAGC  
GAACCCAAAACACCACAGCTGTTTCCCGTAGCAAAATCTGGTGGTTCCCTCGCTTGAGAAG  
AAGTACAACTACACCTCTGTGGGTACTGCTATTCACGAGGACTTTAGCAGTTACTATCCG  
CTCTTGCTCACCAATATGGCTGCATTTACCAATGCTGACTTAGGTATTGATGAGAAAACC  
GGGCGCCCTCGTGACCGCTACCGTGAAATCTACGAACAAAAAGAGATCTATGGCGCACAG  
CGCAAAGACCCCTCCATTGATGAAGAAACAAAGCAACGTCTAGGGATTTTGCAGCAAGGT  
ACCAAGTTGATTCTTAACCTCGGCCACCGGTGCTGCTGATGCTGGTCACGACACCCCGATC  
CTCATGAACAATCGCGTTATTGCCATGAGGATTATTGGGCAGCTATTTTCTTGGAGAATT  
GGGCAAGCTCAATCACTGGCTGGTGCAACGATTATTTCCACTAACACTGATGGCCTGTAT

TCCGTACTCGATATGGGGACTAACCAGCGCGTTCTTGATGAACACGCTACAGCCATCGGT  
GTGCAAATTGAGCCTGAAGAACTGGATATTGTCTCCAAGGATTCCAACACAGTGCCGAA  
TTTCTCGGCAATGGCTACATCAATGCGGCC

>RXA01813-upstream

GCGAGAATTCAGAAAAACAAACAGATCAAAGTAAGGCAACAAGTGAGCAACAAAGTTCA  
GAATCCGAACCAAGGTGGAAGCAAGAACTTCCTCTGGGCA

>RXA01813

ATGGTGGCGATCGTCGTGCAATCGTCGTGCGTTCATCGTCATCCAAGGCCAG  
GGCTCAAAGCAGCCAAGCTTGGTGACCGCGACTACGAAGACACCTCTTGGCAATGGAA  
GTAGGCTCCGACTCCATCACGCTGACCTCCGCAAACACCTCCGCCGACGCAAAGTCCGTG  
CAGCTTTTTGAAGACTTCTCCTGCTCTCACTGCTCCGAGCTCTCCCTCGCCACCGACGCT  
GACATGAAGACTCAGATCGAAGACGGCAACCTGGTTCGTCGAAATCAAGCCACTGAACTTC  
CTTGACCGCGAAAACATCGACGGCCACTCCACCCACGCATTGGCAGCAGCCCTTGCAGTG  
GCAGACTCCAACGACGCAACCTCTACTGGAACCTCCGCGCATTCCTCATGGAAGATCAG  
TCCGAGATCTACAACAGTGGTCCGATGATGACTTCGCAGACGGCGTTGAAGCCCTTGGC  
GCAGACTCCTCCGTAGTAGACGCAATCCGAACGGCGACAACATCCAGCGCGCATACGACC  
TGGCAACCGCAAACGGTGAAGAACTCACTGAAGAAACGGCAGCCTGTCTTACCACGCG  
TTCTTCAAGACGGCAAGGATGTTGAAGGCA

>RXA01815-upstream

GAATGAAAAGAAGTGGTGGCCGATGCTTGGCTATCTCAGCCTGACTTTTACACTTGGATA  
TTCTGCTGTTTTTCTCGGGATGCGGCTCTAGAATTGTAGA

>RXA01815

ATGAATCGTTCAACAATTTCCCCAGTTGAAGCCCGCCAGCAATTCGCGCAGGCCTTATC  
CAACCCACCTCCGGCTGGTCCGCGGGTTTTGCCCCAAGCCAACCTCATTTCCATGCCCCAG  
GATCTGGCTTATGATTTCTTGCTTTTGTCTCAACGCAACCCCAAGCCCTGCCCATCTTG  
GAAGTATTAAATGCTGGCGAAACCTTCGGCGGAATTTTCGGCTCAAACGCCACCGAAGCA  
GACATCCGCACCCGACGCGCCCAATACCGCATTTACGCACACGGCGAACTTATCGATTCC  
CCCCCAGCGCCGTCGATTATTGGCGCGACGACCTCGTCAGTTTTCATCATCGGCTGCTCC  
TTTACTTTTGAACATCCCATGGTCCAAGCAGGCGTTCCCGTCCGCCACCTCGAGGCCGGC  
CGCAACGTCCCCATGTATGAAACCTCACTTGCTGCGGACCGAGCCGGTTCCTTATCAGGA  
AACCTCGTGGTGTCACTGCGCATGATCCCGCATCCCAAGTCGCGGATGCCGTCCGCATT  
ACCTCCCGCTACCCCGCGGTTACGAGACACAGTCCACATCGGCGATCCTTCACTGATC  
GGAATCGATGACATCAACAACCTGATTTGGCGGATGCCCCGCTGTCCGAACCAAGCGAC  
GTCCCCGTGTTTTGGGCTGCGGAGTTACCCCTCAAGCAATGGTCATGTCCTCCAAGCCA  
CCGCTGGCGATCACTACGCACCCGGACACATGCTGATCACCGACGCCCCAGATCTGGGA  
TTCCAGGTTCTT

>RXA01815-downstream

TAAACCTGGATCCACCGATGTGA

>RXA01816-upstream

TTGGGTGTAACGGCGTGGGAAAATAGGAAATGCCCTCCTGAACAGGAAGAATCAAGCTTA  
GTTAGAGTCCTTCTTCCCTGCCAGAAAGGCACCTCACAG

>RXA01816

GTGCAATTATTACACACCCCCGAGCCATATCCATTTCTTTCGACGACCCCAACCTCATC  
TCTACCGCAGGGCTGGTCCCGACCATGGCCCTGGCCGAGGACCGGTTAACAGTACCAACC  
GACAAAGGTGCTAACCCAGGTGCCAAAATCACGACCTCATTTGCGGGGATGGTCGCCGGT  
GCCGACTCCATCGACGATATCGATGCACTCCGCCACGGCGGTATGCACCGACTCTTTGAC  
TGGATCTACGCCCCCTCCACGTTGGGGTCGTTCTCCGGGCTTTACCTTCGGGCATGTC  
CGCCAACTCGACGCTGTGGCCTCCCGGTTCTTGGTGGGCTGGCAACACAGGCCCGGCC  
CTGGTCCCGGTTGATGCTTCTACCACTGATACGTCCTTCATCGATGTTGATGACACCATC  
ATTAAGGTCCACGGACATCAGAAACAAGGCGCTGGTTTTGGTTACTCCGGTATCCGTGGA  
CTCAACGCCCTGCTGGCCACAGTGACCACACCAGAGTCAGCACCAAGTGGTCGTGGCCAA



CGATTACGGAAAGGATCGTGC GGTTCCCCGCGGGGTGCAGGCCGGTTGATTGCTGATGCG  
GTGGCTACCACCCGGCGTTTGCCGGGGATGGAGGATGAGAAGATCCTTTTACGCGCGGAT  
TCTGCCTTTTATGGCCATCCCAGTATCAGTGCTGCGATCAAGGCAGGGGCGGATGTGTCT  
TCACGGTGCGGA

>RXA01816-downstream  
TGACCCCAATGTCAAGAAAGCG

>RXA01817-upstream  
AGGATGAGAAGATCCTTTTACGCGCGGATTCTGCCTTTTATGGCCATCCCAGTATCAGTG  
CTGCGATCAAGGCAGGGGCGGATGTGTCTTCACGGTGCGG

>RXA01817  
ATGACCCCAATGTCAAGAAAGCGATCGCCAGGTTCTTGATGATGCGTGCGAGACAATT  
AAGTACACCAACGCGATCTTCGACGAGGACACCGGGCGCTGGATCTCGGTGGCCGAGGTC  
GCCGAGATACCGTTACCGCATTTACCTCCCGGAAGAAAACCGACCACATCCCCGGACTG  
CTGGTGGTACGCCGATACCGGAGCTGAATAACAAGGATGTGGATCAGCCGGGGTTGTTT  
GATCTACACCGCTTCCATGCGGTGTTACCACCGCCGACCCAGGCATCCTCGATACTGTT  
GCTGCGGATAAAACCCACCGTCAACACGCAATCATCGAACAAGTCAACCGGACGTAAAG  
GCCAGTGCGTTGGCGCATATGCCATCAGGTGTATTACCGCCAACAGCGCCTGGTTGGTG  
TGTGCGGTTCATGGCGTTCAACCTCACCCGCACAGCCGGTGTGATCGCTGCAGGCGCGATG  
GCCAGGGCCACCACCGCAACGATCCGGCGGAAACTTGTGGCCGTTCCGGCCAGGATTGCA  
CGAGCGCCCGGAGATTGATTCTTCACTTGCCACGGAACCTGGCGGTGGGAAACCCAGTGG  
TCAAGATTGTGTGATCACGGCCGTTTACCACCG

>RXA01817-downstream  
TAACCGGTAGCTCCCTGACTACC

>RXA01820-upstream  
AAATGCCCTCCTGAAGTGAAGAATCAAGCTTGCTTAGAGTCCTGATTACCTGCCAGAA  
AGGCACCTCACAGGTGCAATTATTACACAACCCACAGCG

>RXA01820  
ATGTCCGCATCCTTTGATGACCCCAACCTCATCTCGCTTGCTGGACTGGTTCCAACCATG  
CACTTAGCCGATGCTGCCAGCCTGTCCACCTTGGCCAGGACCGGTTGAGCATCACCGGT  
GATAAAGGTGCCAATGCTGGTGCGAAGATCGCCTCCCTAGTCGCGGGCATGGTCGCCGGT  
GCTGATTCCATCGATGACATGGATGTACTCCGCCACGGAGGTATGCGCCGACTTTTCGAC  
CGGATCTACGCCCCATCCACATTGGGGTCTTTTCTGCGGGCCTTCACTTTTCGGCCACGTA  
CGCCAACTCGATGCTGTGGCCTCCCGATTCTTGGTCAACCTGGCCAGGCAGGCACCACAC  
CTGGTGCCACCACCACCGGCAGGCAGTGCGGTAAACGGGTATGTGTTCTGTTGATGTTGAT  
GACACCATCATTGAAGTCCACGGCCACACCAAACAAGGTGCCGGCTTTGGTTACTCCGGT  
ATCCGTGGACTCAACGCCTTGCTGGCCACGGTCAACACCGCACAGTCCGCCCCCATCATT  
GTGGGCCAACGATTGCGGAAAGGATCGTGTGGTTCCCCACGAGGGGCCACCGCCTGATC  
GCCGATGCGATGACCACCACCGCGCCTGCCCGGGATGGAGGATAAGAAAATCCTCGTC  
CGGGCAGATTCCGGCGTATTATGGTCATCCCAGTGTCAGTGTGGCCCTAAGGTCCGGTGCG  
GATGTGTCCGTCACGGTGCGGATGACCCCGAACGTCAAGAAAGCGATCGTCGCGATCCCG  
GAAGATGCGTGCGCAGACGATTACGTACACCGATGCGATCTTCGATGAGGCATCACAATCG  
TGGATCTCCTTAGCCAGGTGCGCGAAGTGCTTTTACCGCGTTTACCTCCCGGAAGAAG  
GCCGACCATGTTCCCGGACGCTTGGTGGTACGCCGATTCTTGAGCTGAATAAGAAGGAT  
GTGTATCAGCCGGGCTTGTGTTGATCTTACCGCTTCCATGCGGTCTTACCACCGCCGAC  
CCAGGCGTGCTGGATACTGTTGCTGCGGATAAAACCCACCGTCAGCACGCGATCATTGAA  
CAGGTCAACGCAGACTTGAAGGCAAGCGCGTTGGCGCATCTGCCGTGCGGGACGTTACCC  
GCCAACAGTGCTTGCTCGTATGCGCGGTGATGGCGTTAATCTCACCCGTGCCACCGGG  
GTTATCGCTGCAGGCGGGATGGCCAAGGCCACACCGCGACGATCCGGCGGACACTGATG  
GCCGTTCAGCCCGGGTCGCCCGCAGGTCCCGCCGACTGGTGCTCCACCTTCCCGAGGGG  
TGGACGTGGCAACCACAGTGGCAGAACTGTTTGATCACGGCCATTACACACCG

>RXA01820-downstream  
TAACCGGTAGCTCCCTGACCACC

>RXA01825-upstream  
GTCAAGGTAGCTGGCCCCGCAACTGATACGTTAAGCTCAAACAAGATAAGTACCAGTTGC  
TGGGGTTTTTCCAAGACAATAAATTATGAAGGTGTGAACA

>RXA01825  
ATGCCAAAGGCAAGAGTAACATAAAACGAGACCGCACCGGTTTCAAGCAACCCAAGCGCA  
AACCGCACCCCGGTTAAGATCAATTCCGCCGGAACCCAATGTGGTACAAGGTCATCATG  
TTTGCCCTTCATGATCGTCGGCCTAGCCTGGTTGATCATTAACACCTCGTGGGCCCCACAG  
ATCCCATTTCATGGCTGATCTTGGTGCATGGAACATATGGCATCGGCTTCGGTCTGATGATC  
ATCGGCCTACTCATGACCATGGGTGGCGT

>RXA01825-downstream  
TAATCCTTCAAAAAAGTGAAGTGC

>RXA01831-upstream  
CCTGTGGATAATTGGTTGTTGGCTGATGGTGTATGTCATTACGGTGGGTCAATCCAATATC  
GAAGTTCGTATTGTTAGTCCCTAGAGGGAGAGGTTGATCA

>RXA01831  
ATGGATTCTCTGGTCCTTCTTGGGCTTCGCATCGCTTTGCTTGTGGTGTGTGGTTTTTC  
GTCTTGTATGGCGCTGCGCGCTATGAGGGCAGATTTGAAAGTGACGGGTCAAGCGTCGACA  
AGCAGCTCCTCCGTCGCGGCACCGCAGGGCCTTGCCCGGGCTTTTAATCGCTCCAGCCCG  
CCTCGTCTTTTGACGGTGGTCGAGGGCCCGTTGGCGGGCTCCTCGATTGAGGTGTGCGAG  
GATATGACGATGGGCCGTAGCCCTGAGTGCACGTTTGTGGTGGGCGATGATTACGCCTCC  
GGCATGCATGCGCGGTGTTTTAAGCGTGGTTCCGAGTGTTTGTGGAGGATCTGGATTCCG  
CGCAACGGCACTTTTGTGCGTGGTACGCGCATTGATCAGCCTGAGCAGATTGCGGTGGGC  
ACGGATATCCGTATTGGTCGTACAGCAGTGAGGCTTGTTCCTCC

>RXA01831-downstream  
TGATGTTGAAACTTAAATATGCG

>RXA01834-upstream  
ACTAAGAACGTGAGCTTGGTTTCATAATACCCCCAGGGTATTGTTAGCCAGGTGATTCT  
AGCCCTTCTTGGCGGCCTAATAATAGGCCTACTTCTTGGC

>RXA01834  
ATGCTCGGTGGTGGCGGTGCCATCCTTGCCATTCCGCTGCTTATTTATGGATTTTCTTTT  
AGCGCCACGCAAGCTACTGCAGCTTCATTAATCATCATCGGACTTGGCGCCCTCATTGGA  
CTGATCAGCCAATACGCTGCCGGGCACGTCCGCCCTAAAGAGGGTCTAAGCTTTGGCCTT  
TTAGGGTTGGTGGCTCATTTGTGGGCAGTCACCTTGCTAGCAATATCCCCGATTCCCTA  
CTCCTGAGCGGCTTTGCCATCCTCACGCTCGTGGTGGCGTTGACCATGATTTCTAAATTA  
AGAAGCACCCGAGAATACATAACCAGAAGGCCAAGCATCCTTGCCATTGCTCTTAGTGCC  
ACCGGCGTGGGATTTTGTACGGGATTTTTTGGTGTGGGTGGCGGTTTTGCCATTGTGCCA  
GCCTTGATTTTTGCGCTCGGTTTTTCCATGCGGCAGGCTAGCGCCACTTCCCTAGTGGTG  
ATCGCCGTTAACAGCGCTATTGCCATGGGATTTAGATATTCCGATTTGGCAAGTATTGAC  
TGGTCAGTGATCTCGCCAATTATCATCACCACCGTATTGGGCGCTTTTAGTGGCGTAAAA  
CTAGCCAAAAAGGTCAAAGCATCATCACTGCAACTAGGTTTTGCTGGCTTCTTGATCTTC  
ATTTTCGATCTATATGGGATTTTCAAGATTTCCCGGACCTTTTT

>RXA01834-downstream  
TAAAACTTCAAAATATACCCCC

>RXA01842-upstream  
CACGTCATGGTCTCGCGGTGATCATCTTCCCTACCGTGACAGGCAAGGCCGCAAACGGCCC  
TGACCACAGGAAAGAAATTACAGAGGAGAGGAAGCACACG

>RXA01842

ATGTCTGAAGGTATACGTGTCCAACGAGTACGGCGGCCCCGAAAAACCAGGAAC TGATCACC  
CGCAACACCCCCCAGCCAGGCCCGGGAGAACTCGGGGTCAAGGTCCACGCGGCCGGGGTC  
AACCCGCTTGATTGGAAGGTCCGTTCCGGGGTTGCCGGAACCCCGCGAGAGCTTCCGGCA  
CCCCCTGGGCGAGGAGGCCCTCCGGGATCGTCACCGCCGTTGGAGACGGTGTGGAGGGCTTC  
GCGGTTCGGCGATCCGGTGTCTCGGCCTGGTGGCCCCCGGCGTCGGCGGATATGCCGAGGAC  
ACCCCTGCTGGTGGCAGAGAGTACCGTGCTAAAGCCGGAGGAGATCTCGTTACCGACGCC  
GCCGCGATCCCCGGTCTGCTGGGGCGAGCGCTACGCCGGCACTCACCAGGTTCGAGCTTGAA  
CCAGGCCAGTTCGTTGCTGATCAATGGGGCCGGTGGTGGGGTCGGGCTGATGGCCGCGCAG  
ATCGGACGGGTCCACAAGTTCCAGGTCTGTCGGCGTTGACCACGAGGACAAGCGCGAGCTC  
ATCGAATCCACCGGTGCTATCTTCGTCGCCACCGGCGACGCCGTCGCGGAGCAGGTGCGT  
GCGCTGCTCCCTGACGGTGTGGACGTAGTCTTCGACCTAGTCGGCGGGGAGGCGTTGCGG  
GTGGTTGCTCCCTTAGCGAAGAATCCGGCGCACGTGATCTCGCGCGCTGATGCTGCCACC  
GTGGGAGAACTCGGTGGACAGGTGCTGCGCCGCAACCCCGAAAATGGTCGGACAGATCACC  
GGGGTGGTCCAGTACGGGCTGGTTCGACCCGAAGGTGCATACGACCTACCCGCTGGAACAG  
GCCGGTAAGGCCCTGGCCACGTTGAGCAGGGCCACGCCCGCGCAAGATCGTCTCGAG  
CTCATCACCTCCCAGGAC

>RXA01842-downstream

TAACCAGACAACGCGGTGACCTC

>RXA01844-upstream

GACCAATTGGTCTCTGCTGCATCCGCATGATCGCCAACGCCAGTTGCGGGTAGGCGTCCAC  
GACCTCGGCCAGGGCCTCGACGGGCAGGTAGAGCGCGCAG

>RXA01844

GTGGTCTCAATCGCCCAGGAGTTGGAGATCATTGAGGACGGCACGGGTGCGGTGCTCGTC  
TCGGAGCAGGCAACCACCTTCGACAACGGGTTCATCGGCTACTCCTACTTCACCACCGGT  
ACGGACGGAGCCACCTGCATCACCGACCTTCGCCTCAGGGCCTCCCCACTGCCGCAGGTT

>RXA01844-downstream

TAACCGGTACTAGCCGGTTTTTC

>RXA01845-upstream

GGCTCCGTCCGTACCGGTGGTGAAGTAGGAGTAGCCGATGAACCCGTTGTCTGAAGGTGGT  
TGCTTGTCTCCGAGACGAGCACCGCACCCGTCGCCGTCTCA

>RXA01845

ATGATCTCCAACCTCTGGGCGATTGAGACCACCTGCGCGCTCTACCTGCCCGTCGAGGCC  
CTGGCCGAGGTCTGTGGACGCCTACCCGCAACTGGCGTTGGCGATCATGCGGATGCAGCAG  
GACCAATTGGTCCGGTCCCGGGAACGCGAGACCGCACAGACCACCTCGACTGTGAGCAG  
CGCGTGGCCGCGCCCTCCAACACCTGGACGCCAAGCTCGGGCAAATCCGACAAGACGGA  
TCCAGCCTGCTGCAGGTCCGCCTGCGCCGCGACGACGTGGCCGGCACCAACCGTCGAGTCC  
GCCTCCCGGGCAATGGCGCGGATGAAGAAAACCGGTGTCATCGACTCCGGCCGCGAATGG  
ATCGCCATTACCAACCACAGGCCCTGGCCGACCTGGTTCGCCGGCCTC

>RXA01845-downstream

TAAACGCCCACATCCCTCTCTCT

>RXA01846-upstream

GTATTTAGGAATTGAAACCCACTAAAAACAGACTAAGTTACTAGGTGATAACAAAAGTT  
GTTTATTACTTATGGGAATAGTGTGGAAAGTAGGGTGAAT

>RXA01846

ATGTCAATTCCCTGGAAATGTTAGTTATGTTGCACAGGGTGGCACCGGTTGGGATGGTGCT  
GATCAGTACACCACGGGTGAGAGTTGGGATCTACAGTCGTTCTTGAAAACCTCGACTGAC  
TACCTCATGATTATTGGTGGTTCGCTGCTGGCACTTGTTGGTGGTGCTGCTGTGATTGG  
GGCTTTGTCAACGTGATGCGCAAGCTCTTCGGTGGTCAGAGTGGTCAGCAGATTCACTGG

TTCACCACTATTTTGCTC

>RXA01847-upstream

GCCCTGCCCCCTCGATTAAAGAGGCAAGGCTTTTACAGTATCCTCTCATGC

>RXA01847

ATGCTTATTGTGTTGCCCTCCCTCAGAACTAAGACCCACGGCGGTTTCAGGAAAACCTCTG  
GATTTTTCACCATTTGAGTTTCCCGTCGCTCACCAAGGCACGCCAAACAATACTCGCTGAC  
CTGCAAGCTTTGGAGGTAGATGAGGCGCTGAAAGTTTGGGCATTTCTGAAAAGCTCCGC  
CCTGAGGCCGAATCCAATCGCGCGCTGGAGACCAGCCCTACGATGCCTGCGATTTTTCGG  
TATTCCGGAGTGCTTTATGATGCGCTCGACGCTGCAACGCTGCCGGAGAAAGCACTGGAA  
CGCCTCGCCATCGGCTCGGCACCTTTTCGGCGTCATCCACGCCACCGATCCGATCCCGCAT  
TACCGCCTGTCCGGCGGCACAAAACCTGCCCACCAAAAGCGGCGAGCTGCCACCATGAAG  
GCGCGTTGGGGCACAAGCATCAGCGAAGCGCTTATCGACGTCAACCAGCTGGTGATTGAT  
CTTCGACGCGGGACCTACCAACAGTTGGGTGCGGTAAAAGACGCGGTACGGTACGCGTG  
GAATCAGTCATGGAGGATGGCTCCCGCAAAGTAGTCAGCCACTTTAACAACACTACAAA  
GGTGAACCTCGCCGCGTGCTCGCGCTCTCTGAAAAAGAAGCACACCCGAGAGGACGTA  
ATGAGCATTGCGCAGGCTGCGGGCCTTGTGGTGGAGGAAAACCCCAACCACAAGGAAACC  
CTCACTCTGGTTGTC

>RXA01847-downstream

TAGGCGTTAATCACCATTTTGAT

>RXA01856-upstream

CACTCTCCAGCGTTCGCGCCAGATATGCAGCCAACTCTTGATCGTGGTGTGGAAGCGCTG  
GTTGTAGCTGCTTCTGCGTGGCTAGTAAATAATTTGGCTA

>RXA01856

ATGAATCCTTTTCTTTCGGACACGTTGATTGTCCAGCAGACCTCTTCCTTCCTGTCTAAC  
AACTTTGAGATCTACAATCCAGACGGCGAAGTTGTTATCAGAATCAAACTGAAGGGTCG  
TTGGGCTCTCGGCTGGTCAAGGGCGACCGCAGATTACACTGGAAGACGCTTCGGCACC  
CCATTGATGCAGGTGCGCGATCCCATGAACCTTTGTTCGCGACACCTATGAAATTGATGAT  
CCAAATGGCAATCCCATTTGCTCATGTGCGGAAGCGTTTCACCTTCTTCAACAAGCGGATG  
GACATCGAACTACCAGGTGACCGCGTTATTGAAATGCACGGTAACCTTCCTTGGATTTGAA  
TTTGAGTTCCGCATGGGCGATCGGATTCTTGCAGAAAGTAACCCGAAAATGGTCCGGCGCT  
GGCAACGGATACCTAGGCCGAAGCACCTACGCCCTTATTTTCGATGAAGAAGCCCCCTGAT  
GAAATCAGAAAAGTCATCATTGGAGGCATGGTTCGCGCTAGATCTGATCCGGGAGAAGGAA  
CGTAAT

>RXA01856-downstream

TAAGCCACCCCGTTTCATGTCT

>RXA01857-upstream

TTAAGGGACTTCGCAGCCTACTTGAGAGATTTTGACAGATAACTAATAACCTCCACTTGG  
TCGTACTAATCTAATCTCTCCCTAGGAGTTCTCCC

>RXA01857

ATGGCTTCACGCCGTTTCCGTATGATGCTCACCGCAAGCATCACCGCAGCTTCCCTTGGT  
TTTTCCTTCACCCCAGCAATCGCCGATGAAGCTGTAACCGTTGCTACGGCACCTCCGTC  
GGATTGATTCGGCGTTCGAACCGGATGCACCATTCACCGCAGTTCCACACGACGTAGTT  
CTCGGCGTTGGAGCGACCCAGTCCGAGCTCATTTTCAACTGGATCACCGCGCAGGGCCTA  
ACCGGCCAGGTTGCACAGATCTCCCTGGACGATACCTTCGCATCCCCAATCACCGTTGAT  
GCAGTTTCTGAAAACGTCAGCATCGTGAACACCGAAGGCGATTCCCGCGACCGAGCTGAA  
GGTGAATACGTTGAATACCGCGATGGCGCAGTCAACCGCGCAACCGTAGATAGCCTCGCA  
GAAAACACCACCTACTCCTACCGCGTTCGGCTCCGAAGCTGACGGCTGGTCCGAAGTGCAA  
ACCTTCAACACCGGCACCTACGGTGACAACCTGGAACCTTCTCTTTCGGCGACACCCAG  
CTGTACAACACCCACTCCAACCGTGCAGAAGTCCAGAAGTGGGCAACCAACCTGGAA  
CGGCGGCCACCAATCGAAAACCCAGGAACCTCCTTCATCCTCTCCGCGGG

>RXA01857-downstream  
TGATCAGGCAAACCACTCCAGCT

>RXA01858-upstream  
CGTGTGTTTGTGTTTGACTGGAACAGCGTCGGCTTTTCGGCCACGCGGCCTGCGGACAGTA  
GCGGAATCACGCGGGACATTGATCCCCGGACGTAAAGCCG

>RXA01858  
ATGTTTATGACACCGCGGGCGTTGACCGAAGATAATGAGTTGACCCCTGGCTTTGAAATCA  
CTCGGAGGGCTTATGGTGTCAACCAATGAGTGCTCAGTAGTGACAGAAGTGATGCCGACT  
TGGAGAGAATTATGGCATCAAAGGCTTCGATGGCAACGCGGTGCGCTGGAAAACCTCGGT  
GCTTATGGCATCACACCACAAACGACACGGTATTGGTTCCAGCAGCTGGGAATCGGTTAC  
GGCGCATTAGCCTTGGTCGCCCTATTTTCGCAGTCATTATCATTACGTTTCTCGCCCGCGAT  
CAATGGATCTGGTATCCATTCTGGATGCTGCTGGGACTGTTGTTTCATGATTGAACGCGTG  
CTAACGGTGTGGAGATCCACATGGTTTGCCAGGTTTGTGCTGCGTTATTAATCCAGAG  
CTCATCTACGCCAGCTATCTCAACCTGGTATTTCTCAAAGGCGTTGTGGATATTCTATTG  
GCCAAGCAAGCTCACTGGGGTGAGCATGGTGACAAGACAATGCAGGTAGCCGATGCAGCT  
GCCGAAATTAACGATGAAGGGGAGGAACGCCGA

>RXA01870-upstream  
GGATCATGTCCACCCAGAAGGTAGCCTGTCAGTGTGAGCGTAATCGAGGGCAAGTACCA  
GCTGAAACCTCAAGGCCGAGGTGGCCTGTGGTGGTCAATC

>RXA01870  
GTGGGTGTGGCAGTTGTTTGTGCTGCTTCCAACGTTGATCAACCTGGTGGTTCCGGAT  
AAAGCCAATGACTACAAGCAGCTAGAAATCGATCTTCTGGGTGTGGATTGGTCAGTGCCA  
ATCACACCGGAGGAATCCGCTGCGGTGCTGTGTGAGGAAACATCTGATGAAATCACACAG  
AAGTATTGGGACTGCAACGGGGACACCACGGTGGTGACCATGATCGTCGAGGGCGTGAAA  
GATCCGTCCAATACGTTGCGTCGCATGGTGGGTTTCATCGCTGATAACCAAGTGTGGATGAC  
AGCCTAGAGGCAGTATCTAGCGAAGATGGCCGTGCGCATGCGTTGTATGTGCCAGGTCAG  
CAAGAAGGATCTTTGTGGACGCTGCCTATCGTGGCACTGAGCGTGCAGGGTTCCGGGTGAT  
TATGAAGACCTCACAGCGATCGCAATTATCAACGGCACCTCGTTGGATTATTACAGCACC  
CACATTTGGTCCAGCATGGCCGCTGACCGCGGGTTGCCGTACCAGCAGGACTTCCCCCTG  
ATGCTGGAAGAGGAGCCATGGCAAGACACCCCCGGCGGGATCGTCCCTTCGAGCTGCCC  
AATGATTTCTTTGATCAGTACCCCGATCTTTTTTGCCCCAGGCTCCGTCATTCCCAACCTT  
GAAGGAGAATCCCTA

>RXA01870-downstream  
TGAGTCGCATGTTTAGCATCACC

>RXA01871-upstream  
GCGGGGATCGTCCCTTCGAGCTGCCCAATGATTTCTTTGATCAGTACCCCGATCTTTTTG  
GCCAGGCTCCGTCATTCCCAACCTTGAAGGAGAATCCCT

>RXA01871  
ATGAGTCGCATGTTTAGCATCACCTTGTGGGTGGCCATCCTCCTCTCAACCCCGGCGCTG  
TTTTTGAGCTTGGCCACGTTTCATCTTCGTGGATGGCATCTCTGTCCTCGTGAATATAGTG  
TTCGCGGTGCTCTACTTGGTAGTCATTGTTTTCTGTAAAGTCGCACCCCGCTGTGGCCA  
CGTTTTAAAGGCTCCGGCAGCAAGAAGGGAGGCGGATTTCGCGTGGGCGGCGTCATCATTG  
TTGTGGGGCGCGTTTCGTTGGTTTCGGCATCGTCATGTTGTTTGCCGGTCCGGTCATGGAT  
CTACGGACAAACTCGGCTGGGATTTTCGTTGCCATGAGTTTCACCGGAGCGTATCCAGAA  
GAAATCGCCAAAGCGTTAGGCGTTGCCATCATCTTGTGAGCTTCCGCCAACTCAACCGT  
CCGTGGCATGGATTTATCACCGGCGCGCTAGTGGGCTTAGGTTTTGAGGTCAACGAAAAC  
CTCCTCTATGGCGCCACCGGTGCAATCATGACCCCAACGCTGACCTCGACGGCGTCCTT  
ATGATGTGGCAATACCGCACCATGTTGGGCCCACTCATCCATACGTTGCTCACCGGATTC  
GCAGGTTACGGCATCGCGTTGGCATCTTCCGCGCACGAAAAACAGTCGCCTGGCGCTGG  
GGCGTGGCGATCGGTTGGACTCTCATCGCCTTCGCACTGCATTTTTTCATGGAACCTGATG

TGGGAAAACGTAATCGGTTCCCTATGTCACCATCATCGTGGTCAGCGTTGTCATGTACGGT  
CTGGCTATCTACATCCTCTGGAGTAATTGGGCCGAAGCCCGCAACGACTCCAGCTACGCT  
TTCGTCCCGGGAATCATCACAAACACCAAAGATTTATCGCTTCTTGACGCCCCCATTTCCA  
GTAGGCGCTGAGGTTCCCGAGTCGCGCATTTCCCCAACAGATAGAGGAACCCAAGGCGGAG  
AAC

>RXA01871-downstream  
TAGCTTTCACTCGCTCTCCATCC

>RXA01874-upstream  
AGTGTCCGGCGCAGCATTTGTGGGCGGTGCTTTGGCGTGGCACGCAGCAGTTTGGCATCAC  
AGTTCCGGAGCGCAAAACGCGGTACAGCTTTTCGCGTCGCA

>RXA01874  
GTGATCGCGTATGTTGCCAGCGGTGCTGCCTGCCGTTTGGCGCATTTGCCGGAGCGTTG  
TTGTCCAAGGAGCTGTCGGGACATCTCCAGGAACGAGTCCTTCTCACCCACACGGTGATT  
AATTTTCTAGGTTTCGTGGGATTTGCTGCGCTCGGTTTCGCTGTCGGTGCTGTTCCGCCGCG  
ATTTGGCGCACCAAAATTCGCCACAATTTACCCCGTGGTCTGTGGGGATCATGGCGGTG  
AGCCTGCCGATCATCGTACGCGGCATCTGCTCAACAACGGCTATGTCGCCGCACAGGCC  
TGGCCGCGTACGTGGCAGCATGGTTGCTGGCCATGGTGGGGTGGGGGA

>RXA01875-upstream  
CTWKCKTSRWSWTGTGTRSYWGAWMMCWYWCSCAGCATSRWGCWRGWWWYRMGKWKTS  
SYAAACWGGRGTCARTCSCGGATCTTTGGGTGGACATGTT

>RXA01875  
GTGGATAGTCTTCTAAACAAGGGCGTCGCAGCATCAGACATCGTTGCCATTGTTCGAAAT  
GAAGAAAAGGCAGCAGACCTCAAAGCCCGTGGAATCGCTCTTGGTGTGGCTACTTTTGAA  
GACGAAGCGGCGACTGACTGCAGCTCTTGAAGGTGTGGATCGCCTTGTTGTTATCTCTGGC  
AGCGAAGTGGGGCAGCGCGTTGCGCAGCACACCAATGTCATCAATGCCGCTAAAGCAGCT  
GGCGTGACATTTCATTGCATACACCAGCTTGCTCAACCTTGGTACCTCAAAGCTTGCACTT  
GCTCCAGAGCACATTGCAACGGAAAAGCTCCTGGCAGAAAGCGGCATTGACCACGCGCTG  
CTGCGCAATGGTTGGTACTGGGAGAACTACGAATCTTCAATTGGCGCAGCGAAGGCCACC  
GGGAAGGTATTCGGCGCAGCTGAAGGCGCACGCGTTTCCGCAGCCGCACGTAAGGACTAC  
GCAGAGGCAGCTGCTGTTGTCATCACCAGCGACAACCAGGCAGGCAAGGTCTATGAGCTC  
GCAGGCGCACACGCTTTGACCTACCCAGAGATCGCAGCTGGCATTTGGTGAGGTCAATTGGT  
TCTGAGGCAGAATACGTCAACCTCTCCGTGGAGGAGTACCAAAATGCGCTGGAGCAGGCT  
GGCGTTCCAGCTGAAATTTGCAGCACTTCTCGCAGGCATGGATCCCATCATTTGCAGAGGGC  
GCGCTGTACTCCGACAGCACCGACCTACAGGATCTCATCGGACGCCCGAGCACCTCAATC  
GTTGAGGCCCTGAGCTCA

>RXA01875-downstream  
TAACCTGCTACTCACCTAAAATG

>RXA01877-upstream  
GTATTGTACTAATTGTAATTCCCCGAGAGGGAAGAAGTTTACATGGCGCCCCATCAGAA  
GTCAGGGATCAACCGGATCAACAGCACCCGCTCGGTGCCG

>RXA01877  
TTGCGTTTGGCTACCGGTGGCGTGCTCGCCACCTTGCTTATCGGCGGAGTCACCGCTGCA  
GCTACCAAAAAGGACATCATTTGTTGATGTCAACGGCGAGCAGATGTCCCTAGTGACTATG  
TCCGGCACTGTTGAAGGTGTGCTGGCGCAAGCTGGTGTGGAACCTTGGTGACCAGGACATT  
GTTTCCCCCTTCACTGGATTTCATCCATCAGTGATGAAGACACTGTGACTGTTTCGTACTGCC  
AAGCAGGTGGCGCTCGTGGTGGAAGGTCAAATCCAAAACGTGACCACCACTGCGGTTTCC  
GTGGAGGACCTCCTGCAGGAAGTCGGTGCCATTACCGGTGCTGATGCGGTGGACGCTGAT  
CTTTCAGAGACCATCCAGAATCTGGTTTGAAGGTGAGTGTTACCAAGCCGAAGATTATT  
TCCATCAATGATGGTGGCAAGGTCACTTACGTTTCTTTGGCAGCTCAGAACGTACAGGAA  
GCCCTAGAGCTGCGGGATATTGAGCTGGGTGCTCAGGACCGCATTAATGTGCCTCTGGAT

CAGCAGCTGAAGAACAACGCTGCGATCCAGATCGACCGCGTTGACAACACCGAAATCACT  
GAAACTGTGTCTTTTCGATGCTGAGCCAACCTACGTGGATGATCCAGAAGCTCCAGCTGGC  
GATGAAACTGTGGTCTGAAGAAGGCGCTCCTGGAACCAAGGAAGTTACTCGCACCGTAACA  
ACCGTTAATGGTCAGGAAGAATCTTCCACGGTGATCAATGAAGTTGAAATCACCGCAGCA  
AAGCCAGCAACCATTAGCCGTGGCACCAAACTGTCGCTGCAAACCTCCGTGTGGGATCAG  
CTGGCACAGTGTGAATCCGGCGGAACTGGGCAATCAACACAGGTAATGGCTTCTCCGGC  
GGCCTACAGTTCCACCCACAGACCTGGCTCGCATACGGTGGTGGAGCTTCTCCGGTGAC  
GCTTCCGGTGCAAGCCGTGAACAGCAAATCTCCATCGCAGAAAAGGTTTCAGGCTGCACAA  
GGTTGGGGAGCATGGCCTGCTTGCACCGCAAGCTTGGGCATCCGA

>RXA01877-downstream  
TAGTAGAAATCTGGCATCCAATA

>RXA01879-upstream  
CTTTGCGGGCCGCTGATATTGATCCAACGCTTCGTGGCGAAAAGCTTGATGTCACTGACT  
ATGTGCGCCTAGCTGGGGTGTTGCAGCAAAAGGATGAGAA

>RXA01879  
GTGAAAATTACCGCTAAGGCGTGGGCGAAAACCAACCTGCATTTAGGTGTGGGACCGGCT  
CACGACGATGGATTTTCAGGAGCTCATGACGGTGTTTCAAACCATTGATCTGTTTGACACC  
GTCACCTTAACCACCTTCGATGAGGAGTTGGTGGAGGAGGGGAGCGTCGTCAAGCAATTA  
TCTGTGACCGGTGCCGTGGCGTGCCTGAGGACGCCAGCAATCTTGCCTGGCGCGCTGTG  
GATGCGTTGGTTAAGCGGCGCGCGGAAAAGACGCCGCTGTCTGCAGTTTCGCTGCATATT  
TCCAAGGGGATTCGGTGGCTGGCGGATGGCTGGCGGCTCTGCGGATGCGGCTGCGACA  
CTGCGCGCAGTGGATGCTGGATTGGGCCTTTTCGCGCAGGACACATTGCTGGAGGTTGCC  
GCGGAGCTCGGCTCAGATGTGCCGTTTTGCCTGCTTGGTGGCACCATGCGCGGTACCGGT  
CGCGGCGAGCAGCTGGTAGATATGTTGACGCGCGGCAAGCTACATTGGGTGGTGGCCGCG  
ATGGCGCATGGCCTGTCCACCCTGAGGTATTCAAAAAGCATGATGAGC

>RXA01879-downstream  
TGAATCCGGAATCGCATATGGAT

>RXA01880-upstream  
AGCTCGGCTCAGATGTGCCGTTTTGCCTGCTTGGTGGCACCATGCGCGGTACCGGTCGCG  
GCGAGCAGCTGGTAGATATGTTGACGCGCGGCAAGCTACA

>RXA01880  
TTGGGTGGTGGCCGCGATGGCGCATGGCCTGTCCACCCTGAGGTATTCAAAAAGCATGAT  
GAGCTGAATCCGGAATCGCATATGGATATCAGCGACCTCAGCGCCGCACTTCTCACCGGC  
AACACCGCCGAGGTGGGCGCATGGCTGCACAATGATCTGACGAGCGCCGCACTCAGTTTG  
CGCCCTGAACCTCGCAGCGTCTCTCCAAGAGGCATCCGCTCCGGCGCGCATGCAGGAATT  
GTCTCCGGCTCCGGCCCGACACGGTATTCTTGTGCGAATCGGAGCACAAAGCGCAAGAC  
GTTAAAGAGGCGCTAATCGACGCCGCGCAGGTGTACGCTGCTTACACCGCCACCGGCCCT  
GCGGCCTCAACCGCCGACGCGCGCGCACACATTTTGAAGTGTTC

>RXA01880-downstream  
TAATAAAGACAACTTAAGTATC

>RXA01896  
GCCGCGCCGCCCCTGCACGCCTGGTCGCCGACCGTGGGCGTCGACACGGATGTTGAGCGC  
TGGATTGAGCTGGATAAGTGGGGTTTTGCCCCGTTTTGAGCGCGCGGAAACCACGCATTTA  
GGTCAGCGGCGCGACCGCATCAGGGCGTACCTCAACAGAGAGCTTGACGACGCCACCTGC  
GATGATATTTACTCCGGCTACCTTAAAGCATATGAGCAAACTGGACTGCCTACCCCGAT  
GCCAAGGGCGTTCTCGATCGCGCGGTAGCCACCGGTGCCCCGTGGGAACTCTGACCAAT  
GGCGCAGCCCCCATGCAGCAAGACAAGCTTGATCGCACCGGCCCTTGGCCTGCCAGAACTC  
GTCATGTTGGCGGCGTCCACTCTGGATTCTGCGAAGCCTCGCCCCGAAATGTATGCCCGA  
GCGCTCACCCATTTGGGTGCCCCGAACCGCAACAATTATCGGCGATGATTGGACCAACGAT  
GTCGCAGCTCCCCGCGAAGCTGGCTGGAATGCTCTCTATTTAGATCGTTCCGGAACCGAT

CCACGCGCCGATATCCACTCCCTGGATGAACTCTTTTAC

>RXA01896-downstream  
TAGGCTGGCCTTTATTGTTTCCG

>RXA01899-upstream  
CCTCGCAGCACTTCGCGCAGGCGAATCCACAGTGGCCGCAACCTTGATCAAAGAACACAT  
CGAAGGCTACTACGAAGAAACCGCTGCCGCCGAGGCCTAA

>RXA01899  
ATGTCCCGCACTCTGTGGGCGGTTTCAGATCTACACGTCACCTTCGCCCAAAACCAAAAC  
ACCGTTGATGCCCTCATGCCGCAGGACCCCGGCGACTGGCTGATCGTCGCTGGCGATGTA  
GCAGAGAAAATCCCCGATGTGGTACGTACCTTATCCGCGCTGGTCAAACGCTTTGACACC  
GTGATTTGGGTGCCGGGCAACCACGAACCTTCAACCGGAAAACAGACCGCGTCAACGGC  
AAAGCCCGCTACCGAGCATTAGTCGGACAACCTCCGAGCCATCGGCGTGATCACCCCGAA  
GATCCCTATCCGATCTTTGGTGGCGTCACCATCTGCCCACTTTTCACACTTTACGATTAC  
TCTTTCCGTCCTTCGCGCTCACCGCGAAACAAGCCCTCGCCCAAGCAAAAATAAGCTA  
GACGACGAACCTAGCCATCGCCCCCTACGTAGACATCCCCGCTGGTGCGCCGAACGAGTC  
ACCTACACAGAAGACCGCTAAAAGCCACCAAAGGCCCAAAAGTCTGGTCAATCACTGG  
CCGCTGGTCATTGAGCCCAACCACCGGCTCTTCCAAAAGACATCGCGCTGTGGTGTGGA  
ACCACCGCCACCAGGGATTGGGCGGTACGATTCAACGCTCTCATGGCCATTCACGGTCAC  
TACATATTCTCGCCGAAACCCGCGTTGATGGGGTAAGCCACGTGGAGGTTCTTTGGGT  
TACCCCTTTGAAAACACCCACCTCACATGAAGCGTCGCTGGCCGTTTCCGGTCATGCAG  
ATTAAC

>RXA01899-downstream  
TAACTCTGTTGCTTAAATGGGGG

>RXA01902  
AACTACGACGCCCTACAACGCGATGTACCCACGCCCTAACCAGGTCGATGAGAATACTTTC  
TTTCGAGTACAACAATGCACTCTTCCTGTCCCTGGACTCCAACGACTACTTGGACATCGAC  
GACGACATCGCATTCCTTCGCGACACCGTCGCAGCACACGGTGACGACAAGGACTGGATC  
GTCTTGACCTACCACCATTCCTTCTCCAGGCCCTACCACATGGATGACGCTCGCATT  
AAGTACCAGCGCAACGCCCTACCCCAAGTGATCTCTGAACGTTGACTTGGTTCTC  
GGTGGACACGACCATCTACACCCGCTCCCACTGATGAACGGCTTCACCCCAAGTCGAT  
GCAGGCCGCGAAGCAGTTGTGCGGTGAAACTCTGAACCCTAAGGCCGGCGAAGTTGTTTAC  
CTTGCAACCAACTCTTCCTCAGGCTCCAAGTTCTACGACTTCTACGACTTCCAGCTCGGC  
CAGCGTTACGACACCGGACTGGATTTCAGGAAACCGTCGATCAGAAGAAGATCCGCACC  
TACACCGCAGTCTGGAACCGAGGACAGGTTTCAGGACTACACCAACGTTGAACGACCCCA  
GAAGGCCCTGACTGTGACCACTAAGGACGCGAGTCTCCGCGGAGCTGGTTGACCAGTTTACC  
CTGAGCAAGCAGGACCGCGACGAAGAATCTGAAGTCCCAGTTGAAGATGACAAGGACGGA  
GACAACGCGACCGGCTCCTCCAACCTTGGTCTAGCTGCTATCTTGGCTCCAGTTCTGGCC  
ATCTTCGGTTTCGTCGGTGGACTCTTTGTTGGCGCGGCTCCCTCGCTGAGTTCTTTGCC  
AACCTCGGCGTGAAGATGCCTTTC

>RXA01902-downstream  
TAATACTGTCTGAGATTCAAGCA

>RXA01903  
GCTCACCTTGATGACCGTGGCATCTATATCATCCCAGCTCAATATCCTTGGGGATACGAG  
GAAATCATTAACCTACCGGCACGCGCTACCTCTACACCTGCTGTTGCTCCTCGCACTGAG  
GCTGCTCCAGCTACAGTATCTGATGCTGAGGTCCAGAGCCTGCTTGAGTACTTGCGTACT  
AATGCTTTTCGTAAGTCGTACGACGGCGACACCACGAAGGCCGACATCTTCAACAAGCAC  
GCGGATACTGTCAACAAGCTTGCAGCACTACGTGCACCC

>RXA01903-downstream  
TAAACCCACACCGCATAACCCCC



>RXA01904-upstream  
ATTAGTTTTTATTCGCAAGGGTGGTCTAAATTTTTTACTACTGCGTCGTGTCCACCGGAT  
ACACTTGAGGTAATACAGTTACGAGGCTAAGGAGTATGTA

>RXA01904  
ATGAGCATTTTCGCCGAAGAATTCCGGTACACCAAACGAGAACGCCGCAGCAGCGCAGGTG  
GCAGCAAATCTGGCTAATTTAACGTCGCAGGCTACAGGGTCCATGGACGAACTAATGAG  
CAAGTCATTAAAAGTAACGAGCATGGCTCTGATGCTTATTTGGCGGATATTAAAGCCAGT  
CGAGAGATGTGGGCAAAAATTGCGCTCGATCCGAATCAATCTGAAGAACTAGGAAAGAA  
GCTCGGGAGAATATGGCGCGGATAGATGAGTACGCTCGTGAGCACGATAAAGACAACAAG  
GGTTTGTGTCAGAAGTTAGCGAAAAACAAAGCAGAGCTCATCGGGACTGTTGCGGTTGCA  
ACCTTAGGTGTAGTGGCAGCCATTGCTAACAAATGGCAAGATACCGATGATTCAGTTGAAA  
AAA

>RXA01904-downstream  
TAACCCCCGCACAGGCTGGACAT

>RXA01905-upstream  
AAATGAAAGTCACAACTTTGTTGGGGTTTCTTTAAAGTAAAATACAGAAGTTTCTCTGG  
CAAAAACCTCACTACTTTCTACAGAAAGGCGTCTTCCTC

>RXA01905  
ATGAAGGCTTCTCAGACCCTCACCCGCAACACTCGTGACGCAAGCTCGGCATGGGTATT  
CTCGCAGCAACTATTATGGCTACCGGTGCACCTTGCTGGCACTGCTCCACAGGCGACAGCA  
GCAGTAGATAACCACTGCGCCATACGTGTCTATGTGCTTGACATTCTTGGAAGGTTGGT  
GAACCAATCAAGCCTCAGTACCTCACCATCTCCGATCAGTCCGCCTACACCGTGACCTTC  
AAGTACATGCCATCTCTGGTTGAAGTACGACGCAAACAAGAAGATGCTGTACGGTACCCCA  
ACCGAGGTTGATGTCTGGACTCCTGAGGTACATGTTGTTGATGCTCATGGCAACAAGCAT  
GTCCGTTACTTCAACCGTTGTAGCAGTCCCAGCAAACACTGGACCAACCACCACCGCCA  
TCTACTTCAAAGCCATCTACCCCGCAGGTGACCACCCCAACTACTCCGAAGGCGCCTACC  
TTGCCAAAGTCCACCTTCGACTGGACCTTGTGGGGCTCCATCTTTGGTTTC

>RXA01905-downstream  
TAGTTCTCACTAGCACCTCAAAA

>RXA01906-upstream  
GCGTTCGGGTAAACCCGTGACAATCGCACGGGGCTTGTTTACCTGACACTCAAGCCCCGT  
GCACCACAACAACCCACCTTAAAGAAAGGTTTTTCCACCC

>RXA01906  
ATGTCCGAATTCCTACACCTACGACTTTTTCAGTTCGAACCAGAAACGCTTAGCTCCGCC  
ACCGATCTCACTGTTGATGCACATAAAATCGCAGAACTGCTGCTCAGCACCCTGATTAC  
CGTGTGTTCTACATGCCGCGTCTCGCCGGTGTGACTCCTATCGTGTCTTACCTCTATGTC  
TACGATGGTGAAAACCTTCCTCATTGTTGGTTCGCTCCACTCATGTGCCGTGGGAGTACTAC  
GTTCACTACCCCATCAAGCCATCACGTGAATTTGGCTCTGCTATTGCTGTGCCTCTCGAT  
GATTCTGATGACCCTTATGATGCAGCAGAAGTTGTTGCTCTAGTAAAGCAGTACATGACG  
CCCACGCTCACTCCTGGTGAGGGTTATATGCAGGGCTTTTACAAGGGTCTCACCTTCACC  
AACCACCTCGATATACATCGACCACTGACCCAGATTATCTCAGAC

>RXA01906-downstream  
TAACAGCTATATTCACCCACCTA

>RXA01907-upstream  
TTCGTTTTACCCACACCAGCACGTCACCCTCTTGTCATCACGCCGAGAGGGTGACGTGCTT  
TTTTCTACTTTTCCCTCATAACTACAGAAGGGACGCCCTC

>RXA01907

ATGTCTGCTTTTGTATGAACTCCGCAAGAACTACCGCTACAAGTTCACCTGACACCTGGCCG  
GCCAACGCTGTTACCGGCACCGGCTACTACGCCAACCCAGCTTTTATCATCATCTCCGCT  
GATGCCATGACGCAGAACACCCATGCCGATTCCAATCTCATCACGGTTAAAGAGCACCTT  
AACACCCTGTTTCCGTACAGCGTACAACGCAAGGATCGTGCCCTTGTCTCTGAGATCTAC  
ACCCCTATTAACCTGCTCGAAGATAATCCAGAACTAGCTCAAGAAATACTCGATGTGCTC  
GACACCCTGAGCAACAACGCTGTTTTTAACGATGCGCACTACAGCGAGCTTGAAGTAGAG  
CGCCTCAATGAATATGTCATCGACACCTTGGCCTATGACATGAAGTCCGACATGATGCGC  
GCCCTCGTTAAGGCCCGACCAGAGGCCGATCTTGAGGCGATGGAAGAACTCGACATTGCC  
AATATCCAGAGCTGGATTAATCTCCACTCCTCCACTGTGAGCGAACACAACGATGGCAGC  
GTTGATGATGCACCGTTTAATTCTCTCGCATTAGCTGAGATTTATTTGCAACAGCTTGCA  
GACCACACTGTC

>RXA01907-downstream  
TAAGCACGCTGTGTAACCTACCAC

>RXA01908-upstream  
TCCACGACATCTGACACAGAAAGAAGATTACCATGTCTAAGAACAAACGCAGCTCACCCG  
CAGTCTGTCTTCCATATTTTCATATCCCAGCACATACCACT

>RXA01908  
ATGCACTCTGACCGCTTTGAGCACCCAGACAACGGCTATGGCTACACCATTTCGTCAGGAC  
ACTGATGCAGAGAACCCGATGACCCATCACGATACGAAAGATGCAGCTCTCTGGGTTCAC  
AACCGACACGACGCGGAGATACCGTCGCCGATAAGCCAGAAGGCAATGAGATTCTCGAC  
ATCTTTTGCCAAGTTTCATCTGCGGCCAGCACGATAATGATGACAACCCGTTTGAAGTCTGG  
TCCGACGGTGACTCGGATGCATCACTCATCCGCACCAAGGCGTATGTTGCCGAGCACCAC  
CCCGAACTTATATTCGACATCTCTGCGAAAACCATCACGGGTATTCCCAAGGCGATTGG  
CTCGATGTGGTCTGTGTTACTACTGCCGCCACTTGCGACGAACCTTATCCCTGCTGACAGT  
CTTATTGACATCTACCGCCAGTGGGCTTTTGGTGATGTGTGGACAGTGATTCTCTGATTCT  
CAG

>RXA01909-upstream  
TTGTTCTGGGAAGTAATATAAAAAGTCCCGAACAAATTAGTGTGAAAGGGTTTGTATC

>RXA01909  
ATGGCTAATTTTTCGAAGCAAGGATAAAGATGGCAATGTCATCAATCCGAACGCGTCTACT  
AAAGGTGTAGATCTTGTGTCAACGTCTACGACAGCGCCAAGCATGTGACCGAAAAGGGT  
AACACTGTCCACTTTGTGGATGTTTCAGGTAGCGCAAATTCCGATTGACGCTGACGGCACT  
CGTGCGAATGCGAATCTTGACACACAGACTATGCCTCATCTGCATCTTGACACTAAGGAC  
GGTCAGCGCAACACAGGTGTTGCGTATTCTGATGCGCAGATTCAAGCGATGCAGACGGTG  
GCAGCACAGGGGCGCAACCATATGACCCCGCTCTTGAGCAAAGACGGTGAGACAGTTGGT  
TACTCCATGTTGGTCAAGGCTGATGTCATGTTCCCGAAGACCAAGGACGGCAAGTCTCTC  
CCTGCGGTTCATGAACACTAAGTCTCTGCAGCCATCTGGGGTTTCTATTTTCGGACGCGATG  
AATATTCAGCAGCAGCAGTTTATGGCTGTGGCAATGAATCGCCAAGCAGCAGAAGCGCAG  
AAGGCTGCACAAGCCCAAGCGACCCAGGCTCAAGCACCACAGGTGGCACCGCAGCCAGTT  
ATGCAGAATCAGCAATTCCAGGCACCAAGTGCCACAGGGCCAGCAGCCAGCATATGCAGGA  
GCCCTGTCTATGCAGACGCGGTAGCTCATGCAACCGCGCAGCAGCAGGCAGCAGCAGCT  
CAGGCACCGCAGGCACCTGCTGGGAATCCGTTTAACGAGCCGCCAGCAGTAGCAGCAGCT  
CTGGCACCGCAGACGCGCCGCGCAGCAGTAGCAGCAGCTCTGGCACCGCAGACGCGCAGCAG  
CCGGCAGCACAACTCAGATGGATAACGAGCCACCGTTT

>RXA01909-downstream  
TAAAGGCGCAATACACCACACCC

>RXA01910-upstream  
CACCGTTTTTAAAGGCGCAATACACCACACCCCAACAACTTTTTGATTGTTGGGGTGT  
GTCTCAGATCATGAACAGCACAAATGTAGGAGAAGATTGAT

>RXA01910

ATGGCATTTCGCTTCTAGCGGTTGCTGGCACAGTTGCCCCGTTGCAGCAGGATGGGCA  
 AAAGATAAGTTTCTCAGCAACTCTCAGAATAATCAGCAGGCCCAGAATCAGCAGATGAGT  
 TTTGGACAGGTCAACAACAGCGCACAGAATTCTGGATCAGAAAACAGCGGTTTCATGGGT  
 CAATACGGCAATCTGGGTGCAGGTTTGGCAGGTGCTGCTACAGGCGCAGGGCTTGCCTAT  
 AGCGATTTTGAAGATGGTCAAAGTTTGTCCTCGAAGGCCCGCAACATGGTCGGCAAGGG  
 CTCGCTGGTGCCGGAGCTGGTGTGTTACCAAGCTTGCCAATGATGCAATTCAGGCCGAG  
 GGTGGCTCGATGAAGGCTAGTGCTTATCTGCCATTGCAAGCGGCTTGGGATCGTATCTC  
 AAAACGGCGGTCCGGGTGTGATTAAATCCGCGATGGCCAGCGGTGCAGCCGGTTTGGT  
 GCGGATAAAGTGCACGATAAATTAGCTGAGTCTGGTCATGAGGGGTTGGCTGATTCCTTG  
 TCGGGCGCTATTCAAGGAGGTGGTCTTGGTTACTCCACGCTTGGCGGTGCTACTGGTGCT  
 GGTATTGGCGGTGCGACGGGCGGTCTCGCAGGACTAGCACAAACTACTTTGGTGGTGGC  
 GATGACTACAGCAACGCTGGGGCATCTGCATCGGGGTTTAGTGCCAACCAGGTTAATAGT  
 GAGATCAGCACCGAGATTCCGCGAGTTGCGAATCTTGGTCAACCACAGCGATCCGAGCTT  
 GAACAATTAGCGCTACCTCAAGAATCACGGTCTGTAGATAAGAGCTACGACCAAGGCTAC  
 GAAGCG

>RXA01910-downstream  
 TAAGCGCTTTATAACAACCCCGT

>RXA01911-upstream  
 AGATGCCGCAGATCACCGAGTGAGCGTTACTGAGATCACTGAGTCTCGATGGGTAATCCA  
 TATAATTGTGAGCGGGATTCTTAGTGCGCTCGCGGTTCTG

>RXA01911  
 GTGTTTATTATTGGCGCCGGCTTGCCACTGTTGTACGTGCCGATTTTGTGACTGTCATC  
 GTCATGGTGGTGTATGCGCTATTGCGCTATGAGCAGCGCATGTCAGGCACAGTCTACGAG  
 GAAGCAGATCCTGTGCAAAATGGATTCAAGTATCTGGGAGGGCATCAAGTGCGATATTGCC  
 TCGGATATTGCAGCCCGAGCAGAAAGCGAAAAAGCGAAAAAGCCAGTTGCGTCAGATGCT  
 GTTGCTGTTGGTAACATATCGCGTCCCTTGCGTCAGCATATGTTGGTAGAAACCCAGCGA  
 CGTTATCACCAAGCTTGGTCTGAGCTGCATAATGATCCAGCGCACTAGAGGATTAT  
 GGCTCTGGTCTGCGTGACTGTGAGTGTGCGGCATGTGTGGTGGCTCAGAAATTGGGTGTC  
 ACGGTGCACGCTCATGGTGTGGTGCAGGCGAGCGCACGTAAAAAAGATCGCGTCATTATT  
 GGGCGAGCCGATGGTATTGATGTGGCCGGCTGGTGGAACCACCGCCAAGAAGCTCGACGT  
 AAAACGAGCGCGGCTAAGCAGTTGGAGCGCGATGCACAACGCAAGCGAACCAGCTGAG  
 CGCGATAAAGAGATTGAGCGTAAGCGTAAGGCTCAAGAATTTGTAGCGGAGCAGTCAGGG  
 AAAGCTGCTGCAGCACAACGGCGGGCCGAGAAAAAGGCTGCGAAGCAAGCGCGTGTAGAT  
 GAAGCTGGTGGCGCAGAAACAGGCTGCTCAGGAGCAGAAAACTCACTGTAAGCGGGACAAG  
 CAGCGTGCGAAGAAAGCACAAGGGCGCAAAGTTGGTGCCGTTGATAATTCCGCTGTGGAC  
 GATGTG

>RXA01921  
 CACATTGATATTCAACGCCCTCAATGAAAAACAGCTCTTTGTTGGACTCAAGCGCCTGCTT  
 GGTCTCCTCGGTACCCAGATTCTCGAATCTGATCGTCTCTCTGGTGATGATGCCCATGTT  
 GATACTAACGAGGATGTACTTGATCTCATTGCCTACAACGTCTCAGACGTGGTGGGCACC  
 AGACTGCTCGCTGAGGACCCGGTGACTCCGGCTCTTTGATCTGCGGGCAGGTCTACTG  
 AGCACCTACCCAGAGACTGTTTTTGATCATGATGGTACTTTCCGTCAGCCATCCACGCAG  
 ATGCGTAAAGATCGCCTAACGATTAATACCTCATCAGCTCAGTTTCGAGCGCGTATTTTG  
 GCGCCATATCGCCACTCCGCGATGTCCCTGATGCGATTGGCGACATGCCGGTGGTGTCT  
 TACTTGTACCCGATGCAGCAGTCGCCGAAGCAACAGGTCAAAAACAAGTCAACGTGCTT  
 GATGAGTCAAAGAAGTTCTTCTATGACAACATCACCGACCCGGAAGCACGTGCTGCCTTT  
 GATGAGGTCTTTGCTTTTTACGCTGATATTGAGGGTCGCAACTTCAACAGTCACAATGAG  
 GCTATTGATACCCAGATTAAACCAATTACGTGCTTATCTCAACCAGGTTGTTCGATTCGAT  
 GCAGCTGGGTATGCGCTCTATGATGTACGTACACGTTTTGAGCAGATCTTCCCCAAGGAT  
 CGCAGCTACATCAACGATGCTACGGATATGACCCCTCGCGCAGTATCGAGCTTTGACGAT  
 CTGGTTGCACTCTGTGATGATATTGCGGGTGTACTTGATCGAGGTTTAGAGATCTCATCT  
 CCGAATCATCATGAGATGGTGGATGCTATGCGCAAGCAGCTGCACATATTCAGGCATTT  
 ACCGTGCCTGGGACCCATCAACGCCGCTTCAATGACGCT

>RXA01923-upstream  
 CCAAAGTGAATACCCCGACTGCAGCAGCGCAAAAAGTTCAAGTACTTTGGGATGCAAATCT  
 AGTAGCACGTCCCATGTTTCTCACACTCTCAGGAGCTGAC

>RXA01923  
 ATGTCTGCACTTATTAAAGGTTTCAGGACCTCATCATGTGGTTGTCTTAAATGGTTGGTTT  
 GGTTCATGCTGCGGGCTGGGGAGCTTTTCGCTGACTATCTTGACCTCGGCAACTACACCTGG  
 CACTTTTGGGATTACCGAGGTTACGGCAACAGAAAAGACGACGAGGAGAATTTACTCTG  
 GAGGAAATTCAGCGGATATCGTTGCATACATCGACTCGATTGAGGCAGAAAAGGTTTCC  
 ATCCTGGGCCATTCCATGGGTGGAGTGTTTCATGCAGAAAAGTCCCTGCAGACAGCGCCACC  
 CCCATCGCTTCACTGGTTGGAATTTCTGCCGTTGCTGCAGCTGGAACACCATTCGATGAG  
 GATTCTCGGAAGCTTTTACCTCAGCAGGGCACAACCCGGACTCGAGGCGAGCCATCATC  
 GATTTCACC

>RXA01930-upstream  
 CGAAAGAAGCCATAATTTAGAGAGGACAATTCTCTACTATTGGTCAAGGCTCCACCCGG  
 TGTCAATTCGACATTATTACCGCTCACTCACAATCGATGAA

>RXA01930  
 GTGATTTCAACAAATGAGATTGAAAATATTTCACTCAACTCGTCGGGATATTGAAATAGCG  
 CTTGATGAATCTTCCACTAGTGAGCCAAAGAGATTTTCGGAAATTTACACCTTTACCTC  
 GCACTTGCCGAAGGTAAAATATCCTTTCCGGAAAGCCCAAGTGAACCTCGAGAACTCTAT  
 GACCATTTAATGCACGGCGAGCTAGGTAAAGAAAATGAATTAGATGGTGAGATTTTCCGC  
 CAAGGACCCGTGGAAATCCGCGATAGTCGGCAAAAAGTGATTCAATTCAGGTTTTTCTCCA  
 GAATCACAGATCATCGAAGGAATCAACGCAATTATTAAGCTGGCGCACTCAGAAGAGGAA  
 TCCAACCTTGTGGCATCATGATGTCACACTTCATGTTTGAATCAATTCACCCGTTTTAT  
 GATGGAAACGGAAGAAGTGGGCGCTACCTTCTCGGGATACAATTAAGCAAAATTCTCTCC  
 CCTGCTACAGCACTGACAATGTCTTCGGCAATTAATCAATTTCGAAACAAGTACTACAAA  
 GCGTTTCATGCCGTAGAACACCGATTAAATCGCGGAGACGGAACACCGTTTGTATTTC  
 ATGCTTGAGCTGTTAATTGCAGCGCAAGAAGGTCTCATTGAGAATATAAAACAAAGAATC  
 GACTTTTGGCAAGCCTTGAGGACGCCATTAAAACGCTTCGGGGTACCAATTCCTTTAAG  
 AACCATCAGATCAATCTGTTGTACATTCTCGGCCAGATTTCAGCTTTTCGGTAAGGACGAA  
 ACACCTTTCACCTTGAATCGGCAGCAAAGTTTCTTAAAGTTTCTAAGGCAACTGCAACGAGG  
 TATTTTAGAATCTCCGAGAAATGGAATTAGTTCACGAGGTTCAGCAAACGCCCTTTGCGG  
 TTTGCGCTCACGGATAAAGGTCTGTAGATAGTAGGTCTTGAGGTAAAAATT

>RXA01930-downstream  
 TGACTCCATAACGAGAACTTAAT

>RXA01931-upstream  
 TCGATAGGCATGGCGCCGATTCTAGGTCGAACTGATCTAAAGTCCCACCACGCAAAAGTA  
 ACCAAGGCGTACATCTACCCGGCACTTTAAGATCAGTGGC

>RXA01931  
 ATGAGCACTTCTTTTGGAGTCCATTCCCGGAGTTACTATCTCCGCTCGAAAAGCCTTGAGC  
 ACTGCGGGGTTTAAAGATCTGGAATCGCTTGCAAGTACCAATTACGAAGAAGTGGCTGGT  
 CTGTCAGGAATTGGCGCACGTACTTTGGAGCGATTGCAAGCAGCGCTGGTGGAGAAGAGA  
 ATGAGCTTTGGCGGTAAAGTGCCAGAGGCAGAACAGCGCACCGCGACGTGGACAACGCTA  
 GATTCTGCAGCACCAGAGGCAACAGAAACCTCAGAATCCCCAGAGTACTTCATTCAAAAC  
 CTAGACATTCTCGAGAATTACCCACGGCCGGTTGTTGTTGGAAATTTCAACAGAGCG  
 ACAGGCCAGAAACCTTATGTAGCAGGGTCTTCGATTGTTGGTTATGGGCGAGTTCATTAT  
 CGCTATGCCACGGGTAGGGAAGGGATCACTATTTCGTGTGGGTTTCAGTCCCGGAAAGGCA  
 AAGATTTCACTTTATGGACTAACAGTGCGCCTGCGTCTCGAGAACTTCTGAAGAAATTG  
 GGTAAAGCATCTGTTGGTGTGTCTTGCCTATATATCAACAAACCAGAGGATGTTGATCTT  
 GAGGTGCTTGAGGAAATGATCCGTATTTCTTGGGAAGCGGAACCTGGCGAATGT

>RXA01931-downstream  
 TAAATCTCAACCTTTAACAAAGT

>RXA01941-upstream  
CCGGACTTGCCGCTGGTTTAGTCACCTTTTGTCTACGACGGTATTTATTGGTCGATTTCA  
CCAGCGCAGCGTTGAAAAACGTTGGGCGCCAGTCACCCAC

>RXA01941  
ATGGCCTTGACTTCACTTTTGCACCAGCTTGCAGATAAAAAACACAGTGACCTCAGCCGG  
GAAGACATCGTACCGCGGGCCTTTACTGTCCCGACCTCTACTGACGCCCACGCTATTCAT  
CAAGACTTGGA AAAA ACTCCGAACTCCGTACTCAAAGAGCAAAATCACCTAACCCTGTG  
TTGGGAACCTGGTCAGAATTCCTCACCTCCAACAGCGATAACTCCGACATTTTTCGTTCC  
TCCGCTGAACCTGGGCTCCAAATTGGAGCAGGTCCGCGATAAAGCACTCGAAGTGGAACAG  
CGTATCAAAGCCTCTGCTCAGGTGGATCTTACGGACCTGGCTCATGAGATTGAGATCTGC  
AATCAACACCACGCAACCCCTCATCAGTGCGATTACAGGTAAGACTGCAATCGCATACTGCT  
GAGCTTCGGGCTGGG

>RXA01941-downstream  
TGATTTCTTAAGACTGACCTAGT

>RXA01942-upstream  
GCCGCGAAATTCGGTGAAAATTGAAGGTATTCCTGCAGATCAGGCAAATTCCTCCACGACT  
GTGATCAAGGTCAACGGCAAGAACGAGTAACCTGGGATCC

>RXA01942  
ATGTTGCGCATTGGACTAACAGGAGGGATCGGCAGCGGTAAATCTACCGTTGCCGATCTT  
TTGTTCATCTGAAGGATTTCTCATCGTCGACGCGGACCAAGTTGCCCGCGATATCGTCGAA  
CCCGGACAACCGGCATTAGCAGAGCTAGCTGAAGCTTTTGGCCAAGACATCTTAAACCC  
GACGGCACTCTAGACCGCGCGGGATTAGCAGCCAAAGCATTTGTCAGCGAAGAACAACA  
GCGCTGCTCAATGCCATTACCCACCCCTCGTATCGCCGAAGAGTCAGCTCGTCGATTCAAC  
GAAGCCGAAGATCAAGGCGCCAAAGTTGCGGTTTATGACATGCCTTTGCTTGTAGAAAAA  
GGCCTTGACCGCAAGATGGACCTTGTCTGTCGTAGTTGATGTTGACGTAGAGGAACGCGTC  
CGCAGACTTGTGGAAAAACGTTGGCCTCACAGAGGACGACGTGCGGCGTCGAATCGCTTCT  
CAAGTGCCCGACGACGTCAGACTTAAAGCCGCTGACATCGTTGTGGACAATAACGGCACG  
CTAGAGGACCTTCATGCTGAAGCAAGCAAGCTGATTGCTGAGATTCTTAGTCGCGTGAAT

>RXA01942-downstream  
TAGCACTAAAAACATCGTCAAAGT

>RXA01944  
ATCAGAAACCTTCGACTAATTCTGCCTGATGGCCGGACCCCTACCCCTGCCGGAATTTCC  
GATTCTAATGCGTGCGTCAACATGGGAGACAGCGCTGGAAAACCTCGATTTCTTCGATGCC  
ACCTTCGCCCTCCCTGAGGATGCTTTACCGGTGTGGCACACGCATGGGATACCAACCAA  
AGCACAGATGGAGAACACCACATCACCATTTCCCGCGAAGACGGCGGGGAAATCAGCCGC  
ACCATCCGGGTGATAATACTGCCCCAGAACTCACCGTTTCTGGAGTTGAAGAAGGACAA  
GAACTGCGCGGCACCGTAGAAATTGATGCCCAGGCAACCGATGCGGGTGCGGGCGTGAAG  
AGCGTCGAGACGCTTCTCGACGGC

>RXA01944-downstream  
TAACGCGTGCAACTTCCACTAAC

>RXA01945-upstream  
AGAAGGACAAGAACTGCGCGGCACCGTAGAAATTGATGCCAGGCAACCGATGCGGGTGC  
GGGCGTGAAGAGCGTCGAGACGCTTCTCGACGGCTAACGC

>RXA01945  
GTGCAACTTCCACTAACCAACCGGTTCCATCGCTTTGGATAAAGGTGAACACACCTTGGTT  
ATCCGTGCGAGAAGATGAAGTAGGAAACCGCACCGAGAAAACCATCACGTTTAGCACTCCG  
GATGAAAACCCCATCAGTGGTGACTACGCTCCAAGCAATGGGGCCACCGTGGGCGTCGGT  
GACGTTAAGTTATCTGCACGAGCAAGTGATCCAAGTGGCGATACTGTCAAGATGACGTT

CTGGAAGCCGATTACCAAAAATTAGATAGTGGTCGCGTCCGAATGTCATCAGGAACGGTA  
GAAGATGCCGGAAGTGTCTCGCGCGCCGAGGCGAAAAATGTTGGAGAGGGGAGACGTCGAG  
AAGCTATCCAGCCTGGATGGGCTGGGCATGGAAGTTACCTCCGACGCCGCACTGCCGTAC  
CAGCTTTTTGAAGTCGATGCGGCGGATGCACTCGCGGCCGACACTGAAGTGCGCCTGAAT  
TGGGCGGGATCCGCCGATGGTCGCGCGCAGGTGATCATGTATGTTTTCGATGGCGAGGCG  
TGGGTTGAGGTGGATCGTCACCTGACCGCGCATGAGCTGGAAGAGTTTACGCTGCAGGGC  
GTCGTCAATGCGGAAAAATTTGCAATCGGCGGCACACTGTACCGTATTGATTACGCACTCC  
GAAGGCTTCGCCGGTGCGGATCATTCAACTAGAAAATTCGACGTGACCGCAGCGCACCCG  
GATGATGTGGCTCGCTCTGAGTACGATTTACCCCTCGCGTGGGAATCTGACACCCAGTAC  
TACAACGAGGAATTCCACGAGCACCAACCAACATCCATGACTACGTGCTCGCCGAACGG  
GAGAACAAGAATATTAGTTTCATGTTCCACACTGGCGATGTTGTGACGACTGGGATCAG  
CCCGCGCAGTGGGCCACAGCCAACCCCGAATACCAGCGCCTCGACGACGCCGGCCTGCCA  
TATTCTGTCTTGGCCGAAACCACGATGTTGGCCACACCAGCAATGACTACACCGAATTC  
AGCCGACACTTCGGCGAACAGCGCTACGTAGACAACCCGTGGTACGGCGAATCCTACCAA  
GACAACCGAGGGCACTACGATCTATTTTCTGCCGGCGGAATTGACTTCATTAACGTAGCG  
ATGGGCTGGGGTCCAGACGACGAAGAAATCGCGTGGATGAACGAGGTCCCTGGCCAAGCAT  
CCCGAGCGTGTGGCGATCCTCAACCTCCACGAATTCATGCTC

>RXA01957-upstream

ACCTCAACTCCACAGAGCGTTGTTATCAGATGCTGATATGGCTCGCCTTGACAGCAAACT  
GACCGACAAACACTAAACCTCCACAACAAGGACATCATC

>RXA01957

ATGACTACTCGCACCGTATCTACTTCTGCACCCCATGTCACGTCAACATCAATACCGCG  
CACAACAAAACACGCACTGTTACCAATGGCGCCAGAAAACTAATGCAGAGCGTGGCAAG  
AGCTGCATCTCATTTCTGTGTAGGGCCAGAATTGTTTGATGAATTCAAAGCGACCTGCATC  
GACAACGATATTTCCATGACCAAGGCGTTTGTAGAAAGAGCTTCGCACCTGGGTGATGAG  
CACAACGCTGGTGCAACAAAGAAAAGAAACACCCATCGCACCTACGTACAAGCACCCGTT  
GGTACTGTGCGCCACCAGCTCTATTTCCAGGTCTTGGGTATTTACTGTGTTCAAGAAGAGC  
TCTGATCAGATGTGGTACGACCTGGAAAGCAGCCCGCTGATCGCACAAGAGCCCATGTGCG  
AATATGGACATGCATCGTAACGGCTCTTTTGAGCTGCACCTG

>RXA01957-downstream

TAGATCTCTCTCTCGACCACACA

>RXA01958-upstream

ATATGGACATGCATCGTAACGGCTCTTTTGAGCTGCACCTGTAGATCTCTCTCTCGACCA  
CACACAGCTCTCACCACCTCCTAGAAAGGACGGTTTCACC

>RXA01958

ATGTCTAAAAAACGCGACCACCTACCGTCATTCTGACCTTGAGTCACGCACCCATCAC  
AGCCGCGATACACAACCGCCAACTACGCTGCCCCGACCAACAGCTGACTATTATCACCGCA  
CCAGACAAGCATCAACCACAGCTTCGGGTGTTAAAAACACCACCACCCCATCTTCTGTG  
CAGCCCTCGCCGATCAACTACAGCTTTACTGATCCTGTACTTCGCGAGGCTCACTATGCA  
TTCCAGCACAGCGAACTTGCCAGGCCAACAGTCTGGACTCACACTGGGTTCGTGCGCGCA  
CAAGAAGAAATTCGACACTGAGCATAATGCTGCCTATGTCCGTGCCGCTGACCAGCTCTTA  
TCCCTTTTGATGCCTACATCCTCGACAACGGCGATGTTTACACCAAGACCCACGTGCC  
ATCAGTGCTGTGAACAAGAAGAAATACTTGAGCACTTGACGAACACCATATCTGCTGG  
GACGAAGAAGCTGAATTCCCTGCTGCGC

>RXA01958-downstream

TAAAGGTTGCCACTGGTTTCAGG

>RXA01959-upstream

CCCAACTACTATGCACAGCCCGTAACCATCGAGCCGGCTAAAATCTATCAACAGAAAAAC  
CACTGCCTATTTGACCATTCTTGTGCAAGAAAGTACACCT

>RXA01959

ATGCCCCACGACGTTTACGATGTGCAACACATCATTTCCAAGCAACCTTTCTGCTCCATC

TTTTTCCAGCTCCCCGCTGCAGCGCTGAAACCTACTATTCAAAAAGCTGCCACCAACCGC  
GACCTTACTAAGCTCAACACCGAACAGATCGCTGAGAACCTACAGCGCTACCTCGACACC  
TACAGTGTATGTCTCACCAGCGTGTACCATTGAAGAGGTCACTCATGTGCGCAACCCCT  
CATGAGCCTGATTATGAGTTTTCACCACAGTACGGTGCACATATCTCGCTCATCGGTGAG  
TCTTATGCTGTGAACACGGCCACCAACGAGCCTTATGCCACCGACTCCGAGGGCCATCCT  
CTCGCACTGTATTTTGAAATG

>RXA01960-upstream

TCCAGATTGATCGTGCCAAACAAAGACTAAGCCACTCTAGCTAAACCAACTTACCCACCC  
CAACACCCCATGAGGCATCTGCTTCATGGGGTGTTTTGCT

>RXA01960

ATGCCGCAACACTTTTCTCAAGAAAACCTACAGAAAGGCCCCCGTCATTATGTCTGCACCG  
CTCACCATTTCATGATCTGCTGTCCACCAATTTCGAAGCTTAACCTCAAGTGGCTGACCTGC  
ACTGTCTTGAACAGCCCAAATCTCCCCGAACCCTGCATCACGGTTTCTGTGAACCACACC  
GAAGGCATGTCCCTGGTCTCTTTTCGAAGGTGGTCACGGGCTCACCGAGATTGCCAACACC  
CAGCTAGTGCCTGTGCTTGAGCTACCAAAGTTCAATCCTTTTGAGGCACTTGCTATCCAC  
CTTGAAGCCGCCAACAAAC

>RXA01960-downstream

TAAGAAAGCATCCTTCATGACTG

>RXA01961-upstream

AACACCCAGCTAGTGCCTGTGCTTGAGCTACCAAAGTTCAATCCTTTTGAGGCACTTGCT  
ATCCACCTTGAAGCCGCCAACAACTAAGAAAGCATCCTTC

>RXA01961

ATGACTGACAACGCTGACAACACCACAGATAACGTAACCAATAACTCAGACACCAATCTC  
GATTACAGCTTCGACCCGCTCCCTGACGAGCCCTATGCCTACGGCTTGAACCTGGTTCGCT  
GCTGATGCACACTCTGACTCAACAACAACCAGCACCAGATACCCAGAGACTGTCGCTGTG  
GCACTTAAAAACCCGCGAGGACACTATCAACTGGGTCAACACCCAGCGTGCCGAAGGTAAA  
CCCGATGAAATTCGTATCAATAACCCAATTTCGATCAGAGCGTATTGCTGAGTTTGTCCAC  
GAAATGATCATGCATCACGGCCTCGTAGCCTGCATGGAAGATCTCGCAATACTTATCAAG  
CGCGACAAGCTCACCCAGCTGGAAGCCGAAAACGCTATCACAGCCTGGCACAACCTCACC  
AAAGAATCCCTTGGTCAGATCATGGGGCTCTTCTATCAGTACGTGAAAACAACACAAAA

>RXA01961-downstream

TAGGAAAGAAGAAACACCATCAT

>RXA01962-upstream

AGCCTGGCACAACCTCACCAAGAATCCCTTGGTCAGATCATGGGGCTCTTCTATCAGTA  
CGTCGAAAACAACACAAAATAGGAAAGAAGAAACACCATC

>RXA01962

ATGTCTGACAACACTCAGGACAACCCCTTTCTCCATCCGCTACGCACACCCTGACCACCAG  
CTCGCTCTTAATGAGCTTGTTGATACTGCCGATCTACCTGCACCAACAAGCTATATGAAA  
AATCCCTGGTCCGGGGACAACACGCCTATCGCCGAGTGGCGACGCGAGCGCATCACCCAG  
TGGCAGCGCACCCGAGATCATTGTCAATCAACGCGATGATGACGATCTCATTCACGTCAGC  
TTCCCGAAGCTCGGCCAGCACATTTCAGCTCAACACCGACGATATTCTCGCATTGGTCGCA  
GCCTGCGTCACACCCACTGTCAACGACATTGAGGCAACTATCGAAGAAAATCTCCACTCA  
TATCCGCACGATACGGTCATCATGTTAACGCAGATGATCTAGATGATGCCCTTGGTCTC  
GTTGTTGCCGTCAAAGACGCGAGCGGGGAACACTCACCGCGCGCTGTCTGGCGCACCAAC  
ACCGATCATGGAGCTCTTGACGAGACTGAATCGCGCGGCTCATTCTCAAATTCGGTGGC  
AGCTTCGATGACTACGGCGTGCTGCAACAT

>RXA01962-downstream

TAAACCGACTCACTAAGCACCGC

>RXA01963-upstream

CAGATTTTCTCTGTGTGAGCTGGGGTTTTCTGCATTTCCCACTTGTTTTTCTCCAACACT  
CCACACACACCTTCAAAGAAGAAAGTTTCGAAAGATTCT

>RXA01963

ATGAAAAACCGTAAAAAATCATGTCTACCCCTACCACTGTCTGCGCCGTACTGGGTATA  
GTTGCAGCTCATCCATTCCACGCCTCTGCTGTTCATCGGCGGCTCTGTCCCATCAACTGAT  
TCCGTTGCCAACGCTGTGCGAAAAATCGGACCAGGCGCATTGAACTGCAGCGGTGTCATG  
ATCTCACCATCGTGGGCACTCACCGCACGCCACTGTGTGATGACATCAACATACTCGGC  
GACATCGACACCATCACGCCTATTACTCCAGGTATTCATCGCAATGAAGGTAACATATATG  
GGTGAGGTTTACCGCGCACCGTCCGGTGATCTAGCGCTCATTAATATCAACGGCGTGCAC  
AAGGGCACCATTGCGCAGCTCCCCACACAAGAATATCCACTGGGAACCGCTGCACAGTCA  
GTCGGTTTTGGTGGCGGTGGTGTCAATATCCGCACCGCTGAATCGGTCAACATGATTCTC  
ACCGACATATATAGCGTGAGGTGAGGTGAGGAAATTCATCACGGTGTGCGGTGATCACACTAT  
CTCCTCTTTGATTATGACAGTGCTGAACTGGTTCGAATCCACAAAGGTGATTCTGGGGGC  
CCCATCTTCATTGGTGACGAGGTTGTGGGCATTATGTCTCACGGCACAAATAAATAAGAAC  
GACGGGTCTTTTGATGACGAATCC

>RXA01964-upstream

AGAGCCAGATGATGGCTTTGATATGGATGATGTCATGGGCCAAGCGTTCGGTCGCTAGCT  
CATACCTTGTTACAACGACACTTTTAAAGGGAAGAAGATT

>RXA01964

ATGACCAGCGCTGTGAATGTGCAGAAGAAGACCACACAGAAAGTACTTAAGCCCATTAAAT  
ACGAAGAATTACTCTGCGACAGATGCAGTACAGACAGGCCAGCACGGATCTGCTTTAGGC  
TCGAATATCGGTGTCTACACCTATACCGCTGGACTCGATATTGGAAACGGTTATGTCAAG  
GGCATTATCGAGGCAACCGGTGATACGACTGGCAGCTCTGTTGATGTTATTGATATGCCC  
TCTGCAGCAACGCGCATGAGCCGGCCAACGGAAGTTCCCGAACCCAGATGACACCGCTGTT  
GCTGTACCCGGTGCGGATTCTTCAACCACATTGATACCAATTTCAATTTCGCCTATGGTG  
AAAGGTAATTATCGTTACCTTTGTGGCAGCGCAGCTTGTCTGCACGAGGTAGCTTGGAG  
GAATTTGATCTGGTGGGTAAACCGCTCCAAGGCGGAACAAGAACTGAGCAAGGTGCTGGTC  
ATGGCAGTACTTGGCGCCAAGGCTGTGAAAGACTTTGTGGCAGCACATGGTTCGAATCCCA  
CAGGTTGCTGTTGAGGGTGATCCCGGTGTGCTGCGTGTGCATACGTATCTTGCACCTGCG  
TTACCGATTAATGAATATGTGGGTACCGTCATGGGTATAAGGCACAGTTTATGGGTGAT  
GGGGCAGCGAACCCGGCTGTGCATGTGGTGACGGTTAAACAACTTTGAAACCCAGCAACG  
GTGCAGCTCATCTTGTAGCGTGTGCGAGGTCAATTGCCGAGGGCGCATCGGCACAGTATGCC  
ATTACCGCAGGTGGCGAAGTACTTATGAACGGAATGCTCGCCGATGTACGCTCCAAGGG  
CTTGCTCTAGAGGGCGTGACAGCAGGTGATGTGCTACAAGCTCGCCACACAATCGGTGTG  
GATGTGGGTGAAGGTACTGTGAATTTCCAGTCTTTACGGATGGGCGGTTTAATCATGAT  
GCTTCACGCGCCTATGACAAGGGTTATGGCACCGTCTTGGAGTCGGCGATTTCAGGCTATG  
GACGATGCTGGGTGGCACACAACTTAACTCGCGTAAGCAGTTGGCTGATTATTTGCAG  
CGACCACCGAGTGCACTCAAGCGGAATTTCTATACCCGCGTGGAACAGCATGTTGATCAG  
GAGGCAGTGTCTTTGTTTTCAGGATGTGGCTGCAGAGTTCGCACGAGTGTGAGCGACGTG  
GGTGCTCTTACCGAAGTAGCCTTTGTCTACGGCGGTGGTTCCGGCCCGCTGCGTGATCGA  
CTGCATGAAGCGTTGCTGATTAAGGCAGCGGAGATGGGTTCGGAAGATACGTTCCCGGTG  
CTGTAT

>RXA01965-upstream

ACTTCTATGTTACTATTAAATTAGTCAATAACGTTAGTCATAAACAATGCAGTTATTGAA  
GAGAACTTCCCGACACAATGTACGAAATGGGGGTCACAC

>RXA01965

ATGGCTCAAAAACAGGACACGACACATGTATCAGAGGACGATGCCCCGTGGCGTAATGTG  
CGTATGCGCTTCCCAGAAACAGACGCTATCGTTGAGCGGTTTTTGGAAACACAGGGTGCT  
CGTGGCATCTCGCTTTCGATGCGACAGCTGATCTATTTGTTTGTGCTGAATACGGTGAT  
GTAGAGGTTGCTACCGTTATTGGCCTCAAGCTGGTGGAAAGCCTGCAGGCAGGGGCTGAG  
GGTAGTGATCTTTTTGCTCAGCTCGCGGCCGGGGTTGCTGACGTAGACGCTGTGACTACA  
CGCAAGAAGGCACCGCAGCAGATAGCACCGCCATCGACCACAACCCGTGCACCTGATCAG



GTAAATGAGTTTGTGTTGCCGAGGCGGAGAGTCAGCCGGTTGAGGAGTCAGTTGTTGAGGCC  
AAAGTACCCAAGCAGCAGGTTAGCACCACAGCCGGCACAGAAGCCGGAGCAAAAACCAGAA  
CAAAAGTCGGCGCAACCAGCACAGTCAGAGCCAGATGATGGCTTTGATATGGATGATGTC  
ATGGGCCAAGCGTTCCGTCCG

>RXA01965-downstream  
TAGCTCATACCTTGTTACAACGA

>RXA01966-upstream  
CCCTGTTATGGGCTGGGTTTATAAGAAGATGGGTTAGTTTTTAAAA

>RXA01966  
GTGTCTGAATCTGAAAAACAACAACACCAGCAGTCGCAGCTCGCGATGACCGTCTGGTC  
TGGGTCGATCTGGAATGACTGGTCTAGATTTGAAGCGCCACGTGATCGTGGAGGTTGCG  
GCGTTGGTCACTGACGCTAACCTCAACGTTTTGGGCGAGGGCGTGGACTTGGTTGTTTAC  
GCAACTGAAGAAGAGCTCGCGCAGATGGATGATTTGTCACCAACATGCACGAATCCTCT  
GGGCTGACTGAGCAGATCCGGGAATCCGCGGTACGTTGAAGGAAGCCGAAGATGCTGTG  
CTCGCATTGATTGAAAAGCACTGCGATCCAGCCCATCCTGCACCGCTAGCTGGTAACCTCC  
ATTGCCACTGACCGCGCGTTTATCCGCGAACATATGCCACGTCTTGATGAGGCCCTGCAT  
TACCGCATGGTGGATGTGTCTCGGTGAAGGAATTGGCGCGTCGCTGGTACCCACGCGTG  
TACTACAAGCAGCCGGAGAAGGGTTTGGCGCACCGCGCGTTGGCGGACATTGTGGAGTCG  
ATTCGGGAGTTGGATTACTACCGTCGCTCATTTTTTGTGTCAGAGCCTGGTCTTACCTCT  
GAGCAGTGCGCAGATGATGCGCAGGCAGCGGTGGACCGTTTTGCACCCCTACTTTGAT

>RXA01966-downstream  
TAGAGGGTTTTAAGCAGCCTGGT

>RXA01968-upstream  
GAACTGGCGCTTTTTAAGTTGTGGCAATTTTGCCAGAAGGGCGTAACAGGTGCGGGTTTT  
TCGTGGTAGGCGCGGAGCAGTAGCAGGATCTTTTCTTGCA

>RXA01968  
GTGCTGGCAATTGGTTCACTGGCGCTTACGGGTTGCACAATTGAACGAAGCGATGCGCAG  
GAGCAATCCTCGCAGCAAAGTACAGAAGTTGAAGCTGAAGAAGCTCAAGCTCCTGTGATT  
TCTGTTGATGATGGTGATGAGGATGTGGACCTTCGGAATCTGTCATCGTAAAGTCGATG  
GGTGACGGTCTGAGCAAGGTCACCATGACTAATGAAGAAGGCTATGAGGTTGAGTCAGAG  
CTTTCTGACGATGGCCGTAGCTGGACCACTGCGGAAACCTTGGCTACAACCGCACGTAC  
ACCATTAAGGCAACCGATAAGAACGGCGAGACCGCTACTGCGTCTTTTAGTACTGCAACC  
CCTGCAGCTACCACAAACGTGGCGCTTTCTCCGCTGGCTGATTCGTGCTGGTGTGGC  
CAGACTATCGGTTTCCGTTTTGGTTCCCTGTGAAGGATCGCAAGGCGGCTCAGGATGCT  
ATTACTGTGACAACTTACCAAGGTGGAGGGTGGCTTTTACTGGTTGAACAACAGTGAG  
TTGCGCTGGCGTCCAGCGGAGTACTGGGAGCCAGGTACTGAAGTTACGGTCGAGGCTGAC  
ATTTACGGCAAGGATCTCGGCGGCGGTGTCTGGGGCGAAACTGATAACGCCACCAACTTC  
ACCATTGGTGACAAGGTTGAGGCTGTGGCAGATGATGCCACCAAGACCATGAGTGTGTAC  
AAGAACGGTGAGTTGCTGCGCACTATGCCGGTATCCTTTGGTCTGACACCTCTGAGTGG  
GCAACGCCAAACGGTACCTACATCATTGGTGATCGCAATGAGTCGATGATCATGGACTCC  
ACCACCTTCGGTCTGGGATATGAGGAGGGTGGCTACCGCACCTCCGGTGAAGTACGCGACC  
CAGATGTCTTATCTGGAATTTACGTGCACGCAGCACCGTGGTCTGTAGGTGCGCAAGGT  
AGCTACAACACCTCACATGGTTGCATCAATGTATCCACCGAAAATGCTCAGTGGTTCCAG  
GAGGCCGTGAAGCGCGGTGACATTGTGACCGTGAAAAACACCATCGGTGAGACTTTGAGT  
GGCTACGACGGACTGGGGGACTGGAACATTCCATGGTCTGAATGGAGCAAGGGGAACGCG  
GATCAAACTTCGGCGTGG

>RXA01968-downstream  
TAACTGCGGAAGTCGCAGGTAAA

>RXA01969  
AAATGCCAGCGTCGTGGTTTTAAGCCAGGATCCGTTGTATAAAAACCGGAATTCCTTGTG

ACCACGCAGAAGTGGTTTAGTCCTCGTCAGCAAGAAAGCTTGGAGCAGTTGTGGGCGTAT  
GACAAAGCCTACGGGGCGTTAAAGCTTGCGTGGCTTGCGTATCAGGCGATTATTGATTGT  
TATCAGATGGGTAAATAAGCGTGAAGCGAAGAAGAAAATGCGGACCATTATTGATCAGCTT  
CGGGTGTGAAGGGGCCGAATAAGGAACTCGCGCAGTTGGGTGCTAGTTTGTTTAAACGA  
CTTGGTGATGTGTTGGCGTATTTTCGATGTTGGTGTCTCCAACGGTCCGGTCGAAGCGATC  
AACGGACGGTTGGAGCATTTGCGTGGGATTGCTCTAGGTTTCCGTAATTTGAACCACTAC  
ATTCTGCGGTGCCTTATCCATTTCAGGGCAGTTGGTCCATAAGATCAATGCACTC

>RXA01969-downstream  
TAAACAGGAAGAGCCACTTAAG

>RXA01973  
TCCGCGATGTCTAAATCGCAGGATGATCGAAAAATTGCAGAGCTTGAAGCACAGTTTCAT  
AGTCTTGGTCTTAACAACACTGAACTAGTTACCCTTGATGATGCAGCGTCGCTATTGGGT  
GTGCCGCGAGGTATTCATCAGATTGAGGCCGAGGTGATGTTGGTGAATTCGGTGATGGT  
GCAGATGGCATGGGCGGTGACACGACGAAGTTTTTGCATTATCAGCCAGATGAGTCGCAG  
CCTTACGTCTGGGTGATGAAGCGGGTGTATTCTTTGAGGCGATGAAAAAGCTCATGGTC  
GGGTGTTTTATTGGCTTGTGCATACATCGTGGGTGGGCCAGCTTTAGGGCTTATGCTC  
GGTGGTTTTATCGGTGTGCTTATTGGTCTATGTCTAGGTACTTCCGCAGCCATGATTGTT  
GGCCCTTTTGGGCTTATGCGGATGAAGGCGTATCCACCATGTATGGACAGTCCATGGGTG  
TATATGTCAAGAGCAGTGGCGCACCGCTATGGGTGCGGCACAGCAGACCGAGGTGTCT  
TTTGTGAGCACTGGGACAATATTTACGGGGATAATCTGCAT

>RXA01973-downstream  
TAACAAATTAGTTAATAAAGTGT

>RXA01974-upstream  
ACAATATTTACGGGGATAATCTGCATTAACAAATTAGTTAATAAAGTGATGATTTAATT  
AATTATTAAATTCAATTAACCTTTTTTGTAAAGGTGGGAAG

>RXA01974  
ATGACCCAGTTGTGGCGGGTACGTTGGTGGGAGAGTCGATTAATCGTGAGATTGATGAA  
GACAAGTACCCCTTATTTGAGCTCGTATGCAGCGCCTGTTGCTGTACCGGTGCGTGAGATT  
ATTGGGCGCGAAGAAGAAGTCAATAAGATTATGGCCGCGTGATGCGTCCAGAGATTTCT  
AATGTCTATGCTTGTGGGTCTGCTGGTTCGGGTAAAACTACGTTGGTACAGCAAGCACTG  
GTGAAAGATCCAGAGCGTAACCTACATCGAGGTGATGTAGCGAAAATGGTTGCGGATTG  
AGCACCCCGGCGCAAATGGCTGCGCGTATTAAAGGTGTGTTTGAGGACGCCATTGCCTAT  
CGCAAGCACGAAGGTCATGAATTGGTGCTGTTTCGTTGATGAGTTTCACCAAATTGTGCAG  
CTGTCTAATGCTGCGGTAGAGGCAATCAAGCCGATTTTGGCGATGTCTGGTGTCTTGGT  
GTGCGCGTTATCGCTGCGACAACCTCGAAGAATTTACGAACACATCAGGCCGAACCAA  
GCATTGACGGAGCGTTTGCAGGAAATTCGACTAACGCCGACCGATCAGAAGACCACTGTG  
GCGATTTTGCCTGGTATGGCAGATCGTTATGGCGTAAGTGATCAGTTCATGACGACCAC  
GTTTTTGGAGCAGATTTACTCCACCACTGAGCGTTTTATGCCGAGTTCTGTCCAGCCTCGT  
AAATCCATTCGTGTCCTTGATGCGATGGTTGGTTGGCATCGACTTTCCGGCAAGCCGATG  
GATATGGATCTGCTCGGTGATGTGCTCCACGATGCTATTGGTGTGATATTGCATTCAAG  
GTGATGGTACGAGCATTAAGACAAGCTTGATGAGAAGGTAATGGCGCAAAGTCTTGCC  
ACCACTGTGGTAGCACGTCGTTTGCAGCTGGTGGTGGCGGATCTTCATGATAAATCACGG  
CCTACTGTCGAACCTTCTTGTTCACCGGGCCTACTGGTGTGCGTAAACAGAGCTGGTCAAG  
CAACTAGCACGGGTGCTCTTTGGTGATGACACTGGGCGATTGATTCTGTTTTGACATGTCA  
GAGTTGCGCTTAGAATCAAGTCTTGACCTTTTCAGGTCTGAGCTCACTCGTCTGTCGCT  
GACCAGGGTAACGCTATTGTCTGCTCGATGAGGTTGAGAAAGCTGATCGAGCTATTGCG  
CGGTTGTTACTGCAGGTACTTGATGATGGCCGACTATCTGACGATTACAACCGTGAGGTG  
AGTTTTCTTAATACCTATATCGTCATGACAACCTAACGCTGGTTCGTGAGATTTTCGAGACA  
ATTTGCAACTATGCCACTGATGACACGGGCGATGGTGGGCGATCAAAGACTTTGTGAAA  
AACATTACACGCTCGATCAAGAATAAGGGTTTTCCACCTGAGCTTCTTGGTCTGTAGAT  
GAAATTGTGCCCT

>RXA01976-upstream

GTGATTCCGGGCGTCTTCGCTTAGAGTAAATTAAACCGTAAAAATAAACTCAATTAAGTT  
AGTATATTAATTACTTGGATTTAATTGAAGGGGTTTATAGT

>RXA01976

ATGACGCAAAACACTTGCTGGCGAGCGCAGAATCGTCACCACGGCAGAGCTTAAAGCGATG  
CTGGCAGCAGAGGGGATAAGGTGTTTCTGCCTGGTGTGCGAGCGCGGGCGCCAGAGATCCTC  
GACAACTTCGATCCAGCAGATCGGGCACGTCTCGACGTGCCCCGAGCAGACAATGAAATC  
GTCTCTGTAGAATTCTCCCGCCGCGATACCGTGCAATGCATCAGCATTGCCGACCGTGAC  
CATCTCTACATCACTGACGATATGATCCCGACCCACAACACGTCCAACATTATCTTCTTG  
AAATCCACAGACGAAACAATGATTAAGACGTTGGTGGATTGGTCAGGTGAGCGACATGTT  
GTACGCAGAAATTCAAAGACCGTAACCCGTGACTTGGCACAGTTAGTTATGCGCACCGGAG  
GGTAAAGTGTGCTACACGTCTGCAACTGAAAAAGACCGGTGGTGTCTTATAATGACCTA  
AATACTCTGCCATCGCAGAACGCCATCGTCTTCCGTGCGGGTCAGTATCCGGTGTGGTCA  
CGCAATGAAACGATTGGCCGATGTCGTTTATGTTTGTGCTAACCAGATTATCCAACCG  
GGTCGCGAATACTCGTTGCAGACTATTCCAACACTGTCGAGCGCTAATGAATTCGATGTG  
AATCAAAATGCACCGGACTTTTATGGCGATGCTGGAAAAGCGCATGGCGCAGTCGATTCTG  
ACTCAGCGTGCCGTCGATATTTATAAAAAGGCGACTGGGCTCGATGACTCTGATATTGCA  
CGCCTGGATATGGATGTGTATTCAGCAGAAATCATGGACATCGTGGACACGATGATCGCG  
AAAGATTAGTACGATGACACGCCGATTATGACGAGGGGGATGAGTCTGTCTATGAATGCT  
CGTGATTTTATGAGTCTGAATATGACGTTTGTGATGATGAGTTCGAAGACAGTGCTCAG  
GGCTTCCCGTGGCTACTGGTACGAAGGTGAAAAAGAAATCTCTGTCTGAAGAAGCAGAG  
GTCAATGATGAATTCATTACGATCAGGAGAATGCAGAACATAAGCTCGCTGACATGCGG  
TTGAAGCGTTATGCCGAAGGCAAGGTGTACGAGATATGCTGGCTGATCAATTCGGCCAC  
ATCCTGCAGGACTCACTCGAAGATGAGCTCACTGCAGCCTATGATGAGAGCCTGCACGCT  
TTTGCTCAAGATCCGAATTTCCGGGTGACTGCTAACAACGGCTTGGTTAATGCTGTGCGAT  
GGCACTGTGTTGATTGAGGCGTTGTGCGCAGGAAGATATTGCACTTATGCGCGCGCAAGCA  
GGAGTGGAGCAGTCGCGTGTCTACTCTGAGGGTGAAGAAGCTCTATCTGGCACAGAGGAT  
GATCCGCTGTCTGCTATGGGTAAATATAAGACCACCCGAGCATTCCGCATCATGCTGGTG  
GAGCTTCCGCATTTGGCGTGATCTCGCCAGGGTCACTTTGATAAAGAAGTCGCGCGAGCC  
TTTAGGCGTATTGAAGATGCT

>RXA01976-downstream

TAAGTGTCTGAGCGATAAAAAA

>RXA01977-upstream

AAGTCCAGTGACTAATACCAATAGAATTGAAGACCACTACCTCAAGGGCGGACGTGGCAG  
GGGCACAGACGATCCTAGCAATATGCAAATTGCAGGAAGT

>RXA01977

ATGTTGCGCACATTATTTCGTCCGCAAGATTAGAGCGCTGCTGCTGGTTTTGATGATTGCG  
CCAACTCCATTGGTTCGAAGGGCTAACTTCGACTGCAATGATTGTATCCGTAGTAATCCTG  
GCGATCTACATGGCGATAACAATGTATAGAGTAGTGCACGGTCGCCATGAGTTTCGCGCAT  
ATCGCACGTTCGATGGCGCTTTACGTCAACAAGACTTCTTCTAGGTTTCAAGTTGTTATT  
GCTTATGTAGTATTAATTGCTATTTATGCGCTACTAATTCGCGGACTTGTCTACTCTGTT  
ACATTTGGATTTCATCGTCCCAAGCACACCTAATACGTTTAGTGATGCACCTGCATGGATT  
ATGTGCGTATCGCTGCTGCTCATTGCAGTCGCCAGTTTCATCACATCAATCATGGATGAC  
TTTATTGATGGCATACTCACTGATTTTATGACGAAGATAATGCTGATAGCCCCGATAGT  
CCTGCCGAGGATATAGCCACCCGTCCTGTGCGAGAGCGCAACAACAAGTGCTCTTGCTGGA  
TTTGCTGTTGGTTATATTTGTGGGCGCTTTAATCGC

>RXA01977-downstream

TAACACTTAAACACTTCTCAAC

>RXA01982-upstream

TGCCGCCGACCATGAGATGATCAAGCGCTTTTTTACCCTGCACCTTCGCTAAGACTCTAC  
CTTCACCCAATCATCATCTACTGAAAGAAGGCTTCTGCT

>RXA01982

ATGGCTACCACCAGCCTCCCCACGACGATTACACCGGATTCCGAGGAGACCGTAGAAAAG  
CGTCACTCCCTGACCCCGATCCTGGATTCACTTCCCTGCGAGTCAGTTCCCTATGCTCTG

GCTGCAGGTGAGGGACAACAACACCAGCTTGGCCCCCTACCATCTCACAGTTATGTCCCGT  
 CCCGAAGACAACGGGTGGAATATTTTCGCTGGCTCGTGTGAGCGCAGGCAAGACTCCCGCC  
 ACCCGGTTCTTCTCTGTGCGCAGGACCGACGTTCCCTCTACATGATGGAGGGCGGTTGACT  
 CTCTGGTTTCGCTGATGGACGTCAGAGATCATCGCTGGCGGCAGTGCCACCATTCCCTACG  
 AATACGCCCTGGTCCCTTCGCCCTGTGAGGGCCTAGTAAATTCAGCTCTAGTGTACTACTCA  
 TCCTCGAATGCATTCCCTACACGCGGCAGAGAACTTGGCAGCTCCTCGTTCTCCACACC  
 TTCCGCGTCAGTGGCGAGGTCACAGGGATTCCCTACGAGGAACGGAGGATTGCGGATT  
 ACATTCTATGAGCGGGACCACCTTGCCGAGCTCGGGCCGCATTTTCGATCGCCTCCAGAA  
 GATATGAAGGCGTTTGGCCCTGAACGATGGTGGGGGACCGGCTTGAGCAGTTCGAGCAG  
 ATCAACAGCTTCGTCTGCCGTCCGAGACACACCGGAAATCAGTTCCTCGCTATGCAGACC  
 AAGGGTGCCAAGACGCCCTTATATACCTCGTCATTTCCACCGCCTTCACACCGAAAACCTC  
 ATCTGTCTGGACGGGCGCGTCAAACCTGCACGTCAACGGTCAAGAGATCATCCTCTCCCGT  
 GGGGATTACGTTTCATGCCCCAGCCGGAACCATCCACTCTTTTCGCCTTCGCAGGGCACAA  
 ACCCAGATGCTGGGAGTGCTCACCACAGAGGTATTTCGAGAAGTCTTTGACTACATAAAC  
 ACTCCGACTAATGCTCGAGTTCAGCTGGAGGACGGGGGAAGCCATTTTTCCTGCTGAA  
 GCATTGCGGAAAGTCCAAGCTGAACCTCGATGTCGTGGTGGTTCGGCCCCCACGAATTAGT  
 ACCCTGGATGTTGTTACAACTCGCGTTTCGAACCAATTAACAGAACTATCACCTATCGT  
 GCGCTGGACGCTAACCAA

>RXA01982-downstream  
 TAGTGAGTGAGCCGAAATCCCTG

>RXA01987-upstream  
 GGGTTAGGAGAGGGGAAATCCCCGATGTGCTCTAGGTTCTTATTGGCGATGATTGAAGAA  
 GAAAGAAAACTCAATCAGCCATAAAGGAGCTTGATCCCG

>RXA01987  
 ATGACTTTCCAGCACAACTCTCGACGACTCGCCCCGAAGCACCACCGACAAATGGATCGGC  
 GCGCTCGCTGGTGGCCTCGCAGAGACCTACGGTTGGAATCCGGCCTATGTGCGTCTCGCG  
 TTCGTGGCGTCGGTCTGTTCCTCACTGCCAGGTTACAGATCCTGTTCTACGCCCTAGCG  
 TGGCTGATCATCCCATCCCGAGAAAATCGCTTC

>RXA01987-downstream  
 TAACGTGCGTTGCATAACGCAGA

>RXA01988  
 ATGATCGACCCACTAACTCCAGTCGTTCCCATCACACGGGCACCTCAGTTGCCGAGCTT  
 TATGCTGACGCCCCGCGAGCACCTCGACAATGGTGCAACCCAGGTGATGATCCCGTCAATT  
 TCACCTTCCAACCTGACCTTGTCAGTAGTTGCCCTGGGCAATCAAGAGGTTGACGCACTG  
 GGCCATTCCGAAGGACAAGCAGTTCACTCCCTTCTGGAAATTCATACCCCGAAGCGCAGC  
 TGGCCTCTTTCCGAGCTTTATATTGATGACAATGAGGGTTGGCTCAGGTGTCGCGCTGC  
 TTCGCCCCGCTTGTGGC

>RXA01988-downstream  
 TAGTCCCACCCACCAATTGCAT

>RXA01990  
 ACATCTGATCATGTGGCACAGTTTGGTATGGCAACTGCGTCTGCTGCGACGTTGCCGGAC  
 AGTATTGTGACCAGTGTTTCTTATACGTTGAACGGGCTGTCAATTTCTGACCCGGTTGAG  
 CTGGGTATCAGTGACAACGACAAGCGTGAAGAGCTTCTAGGAGACATACCAAGGGTGAA  
 CTGCGATTGCAGATGGAGTTTTCGATCCCGGATTTCAGCAACTGCCGAGGATGAGTACGTC  
 TTTAATCTCACCGCGGATGGACTTCGGTTTTTCAATTCAAACGATCGCACCGTCCCTGTA  
 CGCAATGATGCAGGTATTCGTGTGCGAGATCTTTTGGTGAGCAACGGTGGTACGCGCGGT  
 ACGTTGACAACTTTAGTTCGGATGCTGGCACTACTTCTCGCACCGCAGCTCTTGATATG  
 GAAGTGTACGGGTGGGTGAGTAGCGCCAGCAGACGGGTGAGCGACCAATTCAAGACTGG  
 ACTGTGGGTAAAGACTGAGGGTCAGGTTGAGAACAAAGGTAGTCCGCTACGGCGTTGCTGGA  
 CACCCGTGGATTATCAGTACTGTCCAGCACACGTGGGTAAAGTCTACGCAGACCGTGTGCG  
 CATTTCCGAAGTGAACAAGACTGGAAGATTAATCAACCACCAGCTGTTGATATGGGCGCA

TTAGCATACGCAGCTCCACTTGGCGTCGTGGTCGGGCACGCCAATGTTGTCATTAGCAAT  
 AACACGGGTGCTGGATTCCGGGGTGCGCTTGTCATACCACACCCACCACACGCGACGTG  
 ATACTTAATTTACAGCCGACAGCGGAGCCACTTTACGCGAACGTTCCGGAGGTGGATTT  
 GAGGATTTTCGACGTTTTCTCGGAAGTTCCTCGGGTAGAGGAAACATCGACGAGGATCAGC  
 TATTCTTACAAAAATTCATTTGAATATGACGAATTTGTTGCCGCATTTCCCGAGTACCGA  
 CGTAGCTGCGTGGAACCAACCGTTGTGTATTCAGCGGA

>RXA01990-downstream  
 TAAGACCACAGCAACAGCGACGT

>RXA01991-upstream  
 TCCGGAGGTGGATTTGAGGATTTTCGACGTTTTCTCGGAAGTTCCTCGGGTAGAGGAAACA  
 TCGACGAGGATCAGCTATTCTTACAAAAATTCATTTGAAT

>RXA01991  
 ATGACGAATTTGTTGCCGCATTTCCCGAGTACCGACGTAGCTGCGTGGAACCAACCGTT  
 GTGTATTTCAGCGGATAAGACCACAGCAACAGCGACGTTTAAGAATATTCCTTCGGATATT  
 TCCTTTAGTTGGACTGGTATTGAAGCACTAGAGCCATTTAGCCCTGGTAAAACCTTCGAA  
 CATAAGGTGCAAGGTTCTGTTGGTGAACCAGCGGGGGCGTTCACTAGGGATAACTATTTTC  
 ACTGAGGGTGAGCTCTACAAACATCGCCACGCAGACGATCTGCTTTCCGGTGATGGCTTG  
 TTTGGCCCCAACATCACCGATGGCGATGGCAACCTCCCCTCTGTTGATGACGGCAAGGAC  
 GGTGACGATGGGTCTGATGGCTCAGACGGCCGAGACGGTGTGTCGCCATTGATGTTGTT  
 GACAATGCTGACGGCACGGTGACTGTCACCTTGTCGGATGGCACTACGTTTACTCTTGAT  
 GCTGGTCAAGACGGCAAAGATGGTCTTGACGGGCTTGATGGTACTGGCCTAACGCTGGAA  
 TCTGCTACCCCTGATGAGGACGGCAACATCACCTATGTTCTTTCTGACGGTACTGAGTTC  
 ACTGTGCGCAACGGTGTTGATGGGTGACACGGTAAGGACGGCAAAGATGGAGTCAATGGC  
 ACAGATGGCGTAGACGGGTGACACGGTAAGGTCTGGTAGAGGTGTCCCGAGTTACCAAC  
 GACAACGGCTCAGTGACCATTTACCTACGAGGACGGTTCACAGATCACACGAAGCCAACG  
 CCGACAAACTGGCTG

>RXA01992-upstream  
 ATAGATCAATGCTGGCATAAACTAAAGGCACAACAGCCGATTCACTTATTTTTAGGCGAA  
 TGCTTGAAGTCGAAGTAAGTGAGGGGGAGAGGATCCGTTA

>RXA01992  
 GTGTACTGCCCCATTTTGCCAACATGATCATTCAAAAGTCATTGACTCCCGCGTCATTGAC  
 GCCGGAAGCGCCATTCGCGAGGCGCCGCGAGTGACGAAAATGCGAAGGCCGTTTACCACC  
 ATCGAAAAAGCTGTTCTCCTCGTTGTTAAAAGAAACGGCGTCACTGAACCGTTCAGTCGA  
 GAAAAAGTAGTCACCGGTGTCGGTTCGTGTCATGCCAAGGCCGCGACGTATCAGATGACGCG  
 TTGAAACGCGTAGCTCAGCAAGTGGAAGAAACAGTCCGCGAGCAACGGAAGCTCTCAAGTA  
 CGCGCTAACGATATTGGTTTAGCCATTCTCGATCCACTGAGAGAACTCGACGAGGTAGCG  
 TACCTACGCTTTGCCCTGTGTATAAGTCTTTTGACAGTGCTGACGACTTTGAAAAAGAA  
 ATCCGCCTCATGCGCAGACGCGGAAGGGAC

>RXA01992-downstream  
 TAGCAGACACAAAGTCTTAACCTA

>RXA01996-upstream  
 GAACACGGCAGCGACACAACTGCACAGATGCAAGAGTGTCGGTACCGTTAAAAACGAAA  
 CACACTTTCACCGAAAAGGACTTCCCA

>RXA01996  
 ATGAGCAAGTTGACTGGCACCTGGACCCTCGACCCTGCACACACCGAAATCAAGTTTCGTG  
 GCTCGCCACGCAATGGTTACCAAGGTTTCGCGGTGAATTCACCGAGTACACCGACTCCATT  
 GTCGTAGATGCTGAAAACCCAGAGAACTCCTCTGCAAAGGTTGTTATCAAGACCGCTTCC  
 GTTACCACCGGCAACGCAGACCGCGATGCACACGTTAAGGGCGACGACTTCTTCGCAGTA  
 GACAAGTTCCTGAAATGACTTTCGAAGCTACTTCCCTTTGTTATCAAGAACGAAAACGAA  
 GGCACCGTTACCGGCGACCTCACAATTTCGTGACACCACCAAGTCCGTCACCCTGGACGTT

GAGGTTGGTGGCGTTGCTGAGGATCCATTCGGCAACACCCGCTTGGCTTCGAAGCCTCC  
 ACCGAAATCAACCGCAAGGACTTCGGCGTAGATTTCCAGGCTCCACTCTCCACCGGTGGC  
 GTTCTGGTTTCTGAGAAGATCAAGATCGAGATCGACGGCTCCGCAATCAAGGCTGCT

>RXA01996-downstream  
 TAAGCGCCACAAACAAAAGCC

>RXA01999-upstream  
 GGGTATGTAGTTAGAGACGACAGACACAGAAATCTTCAGCCTCGCGAACCGAGTGATAGC  
 ATACTTGACCATATCGAATTCTCTACCAGCTCGAGGCATC

>RXA01999  
 ATGACTCTCCCCACCCCTACACATTCCACCAAAGGCAGTTCAGGCCGCATGAAACGAATG  
 GCCCTTATCGGCTCCTCGCTCATTATTTCCATGGGACTTATTACTGCGTGCGGTTTCGGCC  
 GCTGCAGAACCCGAAGCCCTGCACCAACAGTTACCGAACTGTAACAGCCACGGTGACA  
 ACCACAGCTAAAGCCAGCACGATCACCTCGACAGTGACGGAACTACCTCCGCGGAAGAT  
 CTTGCCCCAAGAAATTGTGAAGCCAGCGGCCGTGGAGGAATATTCAGAGCCTCAGGTAAAT  
 ACGCCACAGCAGTTTGCGGCCATCCCGGAACCTGCACCGCGGTTGCACCAGCTCAAACG  
 TATTACGCCAACTGCGCGGCAGTTCTGTGCGGCGGGTGCAGCTCCCTTTATGCGGGATCA  
 CCTGGATATAGTTCCAAGCTTGATCGCGATGGCGACGGAATTGCCTGCGAA

>RXA01999-downstream  
 TAAATAGGAATAGTTAAAAACAC

>RXA02001  
 ACCCGCGACCCCATCGTCGCGAGCCGTGGAATTGTCCAAGCGTTTCAAACGATAGTCAGC  
 CGGAATCACAATCCGGTCGAGGACCTTGTCGTGTCGGTCACGCAAATCCACACCGGCAGC  
 GCCGATAATATCATCCCCGAAACCGCCTATATCAACGGCACTGTCCGCACCTTCAACAAA  
 GACGTGCAGGCCATGGTCATCACGCGGATGGAAGAAATCGTCGCGGGCCAAGCTGCAGCC  
 TATGGGGTCGAGGCGACGCTGACCTACAACCGCAACTATCCCGCCACCATTAAACGACGCC  
 GCCAAAGCCGCCATCGCTGCCGAAGTCGCGGGCGAGGTCGGCCTCGGGGTCAACCCGAAC  
 GGCTCGCGCGGGATGGGGGCGAGGATTTCTCGTATTTCTCGAAAAGCGCCCGGGTGCC  
 TACCTGTTTCGTGCGTAATGGCGACAGCGGGCCTTCAACAACCCCGCCTATAATTTCAAC  
 GACGAGGCCGCGCCCTACGGCGCATCGTTCTTGGCCCGCATGGCAGAACGCCCTTGCCG  
 TTAAAGGGC

>RXA02001-downstream  
 TGATCCATGGCGCTCGAAGATGC

>RXA02004  
 CGCGTCGGCCGTCTGATGCGTCAGAACGGCATTCTCATCATCCGCAGCCGGAAGTTCAAG  
 CGCACGACCGGCAGCGATCATACCTTCAACATCGCACCGAACTTTCTGCAGCAGGACTTT  
 ATGGCGAGCAGGCCGAACCAGAAGTGGGCGGGCGACATCACCTATGTCTGGACGCGCGAG  
 GGCTGGGTCTATCTGGCCGACATTCT

>RXA02004-downstream  
 TGACCTTTATCCCCGCGGGTGA

>RXA02006-upstream  
 ATCATCCATACATGCAGAGCACAGCTTTCACACATAGACATCACTGCACATTTATCTAAT  
 GGGAGACTCA

>RXA02006  
 ATGACAGTTGCACACAAACGAAGTCTGACATGGATCAAGAGACTATCTGCGACTACATTT  
 GCAGCTTTTCTTGGCATTTCAGCTTGTGACCCCCGCTCACTCAATTGAAAACACGACGCAG  
 ATTCCAGAAAGCGAATTGCACAACCTCGGGCTCACAGACGAAGAAATTCAAGAATTCAT  
 CAATATCTCATTTGACGAGTCACTCTTTCAAGAGACTGTAGAAACCTCTCCGATCGTAGTC  
 AGCGACAATGAAGATGCAGCCCCAAGATCCCGGTTTCGGCCTTTTCACCACAAATCCTGTG  
 AAACACACAGATGAGCACATTGGCGCTCTATACTTCTCCGACCTACCAGGTATTTCCAAT

CTTACGTGCACTGCCAACTACATCGGTGGAAAATTCTGGACCACAGCACATCATTGTGTGT  
GAAGGCCGAGTCGCTTCGTTCGGCTTCATCGAGCAGTCGGACGGACAATATGCAGGCATT  
GAGCATGTTTACACA

>RXA02007

GGCATCACCGCAAACCTACGCCCTTCAAGGGCAAAAAGGTTGTGGCTTGGAAAGACCTCGCA  
GGAATCGGATTCAAGGGTGCCCGCACCTTTCGCTCGCCCCACCTCCGATGCAGAAGTCACC  
CTCCCGGGCGTCACCTTCAACTCCCTTCCCCGCTTGAAGCTGCTTCCCACGGCCGCATC  
CCCGATGCGATCACCGCAAGCAAGGAAGCAGCCGACGGCAAGGTTGTAGTCGTTCAAGAA  
GACGGCTACTCCGTGATGATGTCCAAGGAAGAGTACTTGGAGCGCCAAAAGGCCTGGGC  
AAGCCAGTTTCAGTTGAACTTCGATGACGACACCGATGGGAATACAACACAAACAGAAAGC  
GTTGAATCCCAAGAGACCGGACAAGCCGCGTCTGAAACCTCACATCGTGATAACCCCTGCG  
TCACAGCAC

>RXA02007-downstream

TAGAGTGTAATAAGCCGTCCGAA

>RXA02009-upstream

AACTGCATCATTGTGCTTCCTGAACAAGCGCCGTGGTTTAAGCCAGCCATCATCAAACAG  
GCTTAAAAATACTCAATCGTCCCATTCAAGAAAAGAGCAC

>RXA02009

ATGACCATGTACAACGCCGCAAAGACCCCTTGTTCCCCAGATTGTTGCTTTTCGATGACACA  
GCAATCATCGCACTCGACCAAGCCGCGGAAGATGAATTCCGCAAGGCTAACTACCCCGAG  
GTT

>RXA02011-upstream

TGAATTCCGTTTCTAGATTTTTTTTATTGATTGTGAGAGTGCATT

>RXA02011

GTGGCTAATGATTTTATAGAACCAATGATGCCCCGATGCACCTGATAATGGTGAAGCTCG  
GGAAGCTCGGGGTTGTTGATGAAGCAAAAGATAAGACCCGCTCAGCTGCACAAGGCTTA  
GGTTATGGCGCACTACGTGTAGGTTTTGGTACTGCAGCACTTGCAGCCAATGGTGTCTCGC  
TCTATGGGTAATTTGGCTAAAACCTGTGGACACCAATGATGGGGCTTGCCCTGTCTGCC  
GGTACTGGTATCTCTGCTGCCACAGGTGGCATGATCACTGCACGTGTAGGCGCAATGCTG  
GCAGGTACAGGCTCGGCG

>RXA02013-upstream

ATCACCGCGCTGGCGACAATTTTCAGAAAACCTCCACAAAGCACTGCTTGGCCTTTATTTG  
TCCGGTCTTAAACACGGCATGATGGCTAACATCGGAGAAC

>RXA02013

ATGACGGAAAGTCCTGATCTAGCAGTTTCTTTTTTAGCCGCCTTCAATGACATCGAAGCG  
CACCTTCGAACCCAGCTCCGCGCTAAACGCTCCGACAGTTTCAGATGGATGGTACGTATC  
GCCGAGAAACAGCATCTGATTTCCAAAGAACAAGCAGAAACCCTTGATGCTTTTGCGGAG  
CTGCGCAACGCAATTAGCCACGGCCAATACAACGATCTACGCCCGATTGCCGATCCCCGC  
CCCCGACACCGTGGACACCATTGAGAAGATTGCTCCCTCCTTCTCAATCCTCCAATTGCG  
TTAAACGTCCTCCCGGAGCAAAAGGTCCGCTCCTACTCACTTGAAGATCCAGTGAGTAGG  
GCCTTAGAAGTTGTGCACACCACGGAGATCTCCCAATTCCCCATATATAAGGGAACGGAA  
TACGTGGCACTGCTAACTACCAACACAATCGCTCGCTGGGTTGCCTCCGATTTACATGAC  
AATGCCAGCTGGATGCACGTTCTATCAAAGAGGTTCTGGATTATGCAGAATCCTCTGAC  
ACTGCAGTT

>RXA02014

ATCTCCCTCCAACCTCCAAGCCATCAGCACCTTCCCCACCGACCCAGAAGGCGTGTGGACC  
TCCTTCAACCAACTACTTTTCGACCGCGGCTAGGCTCCCTCGTCCCAGCACTTGCCCCA

GAATCCTTAGACGACCTCCCCGACGAGGTCTCCGCCCTGCGTCGCACCACAGAGAAAAAC  
ACCACAACACTCATCAACCTAGCCAAGCAGCACGGACTCGTACACCACGACATCGCGCCG  
GGCACCTACATCGTCGGTTTGATCACCATTTCGCCGCCACCTATCACCGCGCTGGCGACA  
ATTTTCAGAAAACCTCCACAAAGCACTGCTTGGCCTTTATTTGTCCGGTCTTAAACACGGC  
ATGATGGCTAACATCGGAGAACATGACGGAAAGTCC

>RXA02014-downstream  
TGATCTAGCAGTTTCCTTTTATAG

>RXA02019  
GCTGGCACCAAGGTTGAGGCCTCTGACCTTGGACTTCAGGCAATCCCTACTTCCCTACTG  
CCCAGCACCTCCTACGATTGCGATTGACGATGTAGTTGGGCTCGTTGCGGCCCTCCACATTA  
AGTTCCGGGGGAAATAGCCACAAAGCCTCGATTCTGTGGGCACCGAATTGATAAACTCCATT  
GCGACAAACGTCACCTGATAGCTCTTTGGTGGAAGAAATTAACATGGTTCCACTCAGTTTG  
GCTGAACCTTCCGTCATCCCCCTACTGCAGCATGGGGACACCATTTCCGGTTGTTTCCCAA  
GACCCAGACACCGGTCTCCAGAGAACATTGCTGCAGGTGGAACAGTAATTCTGGCGGGT  
GGTACAGACCCCTCAACCATCTTGATTGCGCTTCCACAATCAATCGCTGAAAAGGTTGCA  
GCACAATCGCTCAATACCCCTCTGGCGGTAGTCTGACCGGAGACAGAGCAAATAATTAC  
ACAACCGAAGAA

>RXA02019-downstream  
TAGTTCCCTATTCAAAAAAAGG

>RXA02021-upstream  
TTGGGTCGCCGAGGAGATCTAATCCTGGTTTGAGTTCAGAGTTCACAGGTTTAAGCCTAC  
AAACCTTAGTTAAACATGATGGAAGCGGTCGATTAAAAA

>RXA02021  
ATGAGTGAAAACATTCGCGGAGCCCAAGCAGTTGGAATCGCAAATATCGCCATGGACGGG  
ACCATCCTGGACACGTGGTACCCAGAACCCCAAATTTTCAACCCGGATCAGTGGGCTGAA  
CGCTACCCATTGGAAGTGGGCACACACGCCTCGGAGCAAACGAATCACCCACGGATG  
CTGCAGTTGGTAAACTGGACCAAGATCGCCTCGTCGAACAGGTAGCAGTCCGCACCGTT  
ATCCCCGATCTGTCTCAACCTCCAGTAGACGCGCACGATGTTTACCTGCGCCTCCACCTG  
CTTTCCACCGCTGGTCCGCCCCACGAAATGCACATGCAAAACACCTTGGAGCTGCTG  
TCCGACGTGGTGTGGACAAACAAGGGCCCTTGCCCTCCCTGAAAACCTTTGAGTGGGTGCGT  
GGTGCTCTGCGGTCCCGCGGACTCATCCACGTCTACTGTGTGGACCGTCTTCCCCGCATG  
GTGCACTATGTGGTTCCCCCTGGAGTCCGCATCTCCGAAGCAGAACGCGTGCGCCTAGGT  
GCATACCTTGCTCCGGGTACCTCTGTGCTGCGTGAAGGTTTCGTGTCTTTCAACTCCGGC  
ACCTTGGGTGCCGCAAAGGTGGAAGGCCGCCTGAGTTCCGGTGTGGTCATCGGTGAAGGT  
TCCGAGATTGGACTGTCTTCTACTATTAGTCCCCGAGAGATGAACAGCGCCGCCGTTTG  
CCGTTGAGCATCGGCCAAAACCTGCAACTTTGGTGTGAGCTCCGGAATCATCGGAGTCAGT  
CTGGGAGACAAATTGCGACATCGGAAATAACATTGTCTTGGATGGAGATACCCCATTTGG  
TTTCGACGCCGATGAGGAGTTACGCACTATCGACTCCATCGAAGGCCAAGCAAATTGGTCA  
ATCAAGCGTGAATCCGGCTTCCATGAGCCAGTTGCCCGCCTCAAAGCT

>RXA02021-downstream  
TGACCCATTTTCATAACCAAGTGC

>RXA02023-upstream  
GATGTGGCAGCAATTTTGAAGCAGTACCTGAGCGAGTAACCGCATTTCGGGGTTATCGTGG  
GACTTCCGAAATGTAAGTACGAGACTAGAGGAGGAAACACG

>RXA02023  
ATGGCTCCTAAACAAACTCCCAGCCCCAGAGAAGAATCGAAACCTGGTGGGACCAGTTCTG  
CAACGTCGGCAGACAGAGGGTACTTTTGATCAACGCTTGCTAGAAATGCGCGCTGATCAC  
AATTGGAAGCACGCCGATCCATGGCGTGTACTGCGTATTTCAGTCTGAGTTTGTGGCGGGT  
TTTGATGCCCTCCACGAGATGCCAAAGGCCGTAACCGTCTTTGGTTCCGCACGCATTAAA  
GAGGATCACCCGTACTACAAGGCCGGGTGTAGAACTTGGTGAAAAGCTCGTTGCTGCTGAC



TACGCAGTTGTACCGGTGGCGGTCCAGGTCTGATGGAAGCCCCAATAAGGGGGCAAGC  
GAGGCCAATGGTTTATCAGTTGGTCTGGGCATTGAGTTGCCACATGAACAGCACCTGAAC  
CCTTATGTGGATTTGGGTCTGAACTTCCGGTACTTCTTCGCACGCAAGACCATGTTCCCTG  
AAATACTCCCAGGCTTTTGTGTGCTGCCTGGCGGTTTCGGCACGCTCGATGAGCTTTTC  
GAGGTCTCTGTCATGGTACAAACCGGCAAGGTAACCAACTTTCCCATCGTGCTGATCGGC  
ACTGAGTTCTGGGCAGGTTTGGTGGATTGGATCCGTACCCGCCTGGTAGAGGAAGGCATG  
ATCGATGAGAAGGATGTTGACCGGATGTTGGTCACTGATGACCTGGATCAGGCCGTCAAA  
TTCATCGTCGATGCACACGCTGGATTGGACGTAGCGCGTCTCCACAAT

>RXA02023-downstream  
TAAGCAGTGGCTACATTAGGTGT

>RXA02032-upstream  
CTTAAAAGGGGCTTTATCGGTTTACGGCGAGCGAGACCTTCGGCGTTCACACTTCGCCCG  
GGTCTATTTTTTATGCCCAGGCACGGCTCATAGGAGAACC

>RXA02032  
ATGCCCTTTCTACAAATCTCTCTGCTTTCCATCGGTGTGCGCGCCGATGCGTTTGCTTGT  
TCCGTTGTCCGCGGCACCGCCATTCAAGTCAACCTTTTCAAACGCGCACTTGTCTCGCG  
GGCATCTTTGGTGTCTTCCAAGCGGCAATGCCCTTTAATCGGCTGGTTTCATTGGCCGTTTC  
TTTGCTGGAATCACCTTCATCGCTGAAATTTGATCACTGGATCGCTTTTGCACATTTGGGT  
ATTGTGCGGCACCAAAATGATCTGGGATGCCCTTCCAACCTGAAGATGATGAAACCATTTGTC  
GATGACGGCCGCGTTCAATTTAGACCAGCAATTATCCTGGGGCTAGCCACCAGCATTTGAC  
GCATTAGCCGTAGGCATGGGCCTGGCATTCGTGGAAGTTTCCATCCTCAAAGTGGCACTG  
TCCATGGGCAGCATCACCTTCGCACCTTTCGCTTGCTGGCGCCTGGATCGGACACCATGGT  
GGAGGAAAGTTTGCAAGTGGGCTACGATTCCTTGGCGGAATAATCTTGATCGGAATCGGC  
GCAAACATCGTCTACGAACACCTCAGCGCG

>RXA02032-downstream  
TAACCCTCGGCGCATTATCCTCA

>RXA02036-upstream  
CTAAAATGGAAGCAATGGATACCCGCCGCATGAACCTCCGCCAATGGAAAATCCTCGTT  
GCCCTCATCTCTGCTGCAGTGGCGGCTCTCGGAGGGTGGT

>RXA02036  
GTGCATATTCTTTTGGGCACCTCGCCGACACCGTCTCCTGGGACTGCGGGGGAGGCAGC  
TGCGCCACCAACGATTTGGTATCCCTGTTTCATGCCGGCCGCTTCATGAGTACCCTCGCC  
GCCTGCGTATTTGGCGCGTGGGCCATAGGTTTGATCGCTCCCGCACTATTCATCGCGGTG  
ACTGCTTGGGCATTTGCTCCGGCGTGCAGGCTGCGATTGCCGACGGCTACACGTCCGCG  
ACTTCCGTCGGCTTCGAAATGACTGTCTCGCTCATCTTTTCATCATCGCAGGTCTGTGC  
TTTCTGGGCTGGATCCCCATGTTTCATCAACAACCGCCAAGTCGCGCGCAAGGTCCGCGAG  
AGGGCTGCGGGCTTGAGCAAT

>RXA02036-downstream  
TAGGCTCTCGCTTTTCGACGTTT

>RXA02039  
ACGTCCACCTCCACCACCGCACCCCTTTGGCTCGTGGGCACGCTTGTGTGGCTGGCGGTG  
CAGGCGGTGATGCATGACGGCGAGCTTTACCATGTGGAAGTTCCCACGATTGCGCTGGTC  
ATCGGCTTTGGCGCGCAGCTTCTGATCGGTGTGATGAGTTATCTACTGCCGTCGACGATG  
GGTGGCGGCGGAGCGCGGTGCGGACTGGAACGCACATTTTAAACACTGCGGGGCTGTTT  
AGGTGGACGCTGATCAACGGTGGCCTGGCGATTGTTGGCTGCTACCGACAATTTCGTGGCTG  
CGCGTCGTGGTGTCTCTGCTGAGTATCGGAGCGTTGGCAGTTTTTGTCTATTCTGCTGCCC  
AAGGCTGTGCGGGCGCAGCGCGAGTGATCACCAAAAAGCGCGAACCAATTACTCCGCCG  
GAGGAGCCTCGACTCAATCAAATTACCGCGGGAATCTCTGTGCTTGCCCTGATTTTGGCA  
GCATTGCGTGGGCTCAACCCCGTGTGCGCCGGTGGCAAGCTCAAATGAAGACGTCTAT  
GCTGTGACCATTACCGCAGGTGACATGGTGTATTATCCCTGATGTGATTGAAGTGCCTGCT

GGTAAATCACTCGAAGTCACGATGCTCAACGAAGACGACATGGTGCACGATCTGAAATTT  
GCCAACGGTGTGCAAACCGGACGTGTGGCGCCAGGTGATGAAATTACGGTGACCGTCGGC  
GATATTTCCGAAGACATGGACGGCTGGTGCACCATCGCTGGGCACCGCGCGCAAGGAATG  
GATCTGGAAGTAAAGGTTGCGGCTCCGAAT

>RXA02039-downstream  
TAACCAAGGGCTGCTGAAAAACT

>RXA02040  
TACATACCTTTTGTCTTTGGTCCGATCTCGGTGAGGCTGCCGAAGGTGAGAACTTTGCT  
CGCTTCTGGTCTTGGCTGAAATCGCGCCGGGACAAAGCTCGCCAGCAGGGACAAACCTTC  
GGTGTGTTCTGCTATGCCAGCAACGGCGAAAACCACTGGATGCTCTCCACTGCTCGCAGA  
TTCTTCGGCAAAGTCAAAGGTGTGCCCCGACGAGCAAGAAATCCGCAGCTTCATTAGCTCT  
GACCAATGGAATGACATGTTTGTCTGTGCGCGCTCCCAACTTGTGGCCCCGGTGGTTTA  
GGTCTGAAACAACTCGCGCCGGCAGCTGGATTCCATTGGGAGGAAGAAGACTTCGCAGGT  
GAAGATAGCCTCCACGCATATCTCATTGCTTCCACGGCTGCCGAACCAGAAGCTGAGGCC  
GCTCGTGCTCAATTGCTCAGCTACAACGGCGATGATTGCAGGGCCACCGCAGCGGTTTCGC  
CATTGGCTTCGACAAGGTGCGCGCACGGCACCTGTGCTGGGGAATATT

>RXA02040-downstream  
TAAACCAAGGAAGGATTCTCCAG

>RXA02045-upstream  
CACCTTCCGCCCGGCTGCTTCTGAGATTACAGAAGCTCCTGCCGCTCCAGCCGCTCAAG  
CCGTTCAAGATCTCAACAACGAGAATGAGGTAACCAAGTA

>RXA02045  
ATGAACTTCGCTACTATTTTCGGAAGCATCTTTGAGGTCACCCTCGTGGGCATTTTGCTC  
GGCGCAGGCCTTCCAGCCCTTTTTCGATTAGGAATCCGCTTTGCTCACAGCCCTTCTTCC  
AACGGCACCAACGCTCTTGGAAAAATTGCTTCAACCATCTGCTTTGCCATCATTGCGGTT  
GCTATCATCGCTGGCATTTCTCTGGGTACCAAAGCAACGATCTACCAGTACTCTGGTTTC  
GACATTTTCGGCACTGAAGGC

>RXA02045-downstream  
TAAAAGCACCAGCTGCGAATAAC

>RXA02046-upstream  
TCCGTGCCATCACCACCGGCGAGATCACTGGCATCGTGGACGAAAACAAACAGCAACAG  
AAATTATTAACATCCGACGCAACGCTTCAGGAGAGTCCTC

>RXA02046  
ATGAAAGAGACACTGACCACCGGTTTAACCCACCAAATGACCTACATAGTGCCAGCAAAC  
CGCACAGTTCCGCATCTGCTTCCGAAGCAGCAGAAATTTGAAACCATGCCAGATGTCCTG  
GCCACTGGATATATGGTCGGCATCATCGAGTGGGCCTGCATGGAACCTTCTGCGTCCCCAT  
TTGGACGACGGTGAAATCTCGCTGGGCACTCATGTGAACCTTCTCCACGCAGCTCCAACG  
GTTCTTGATCCACGGTCACCATC

>RXA02049-upstream  
TCTACGCAGTCTCCACAGACCACGCAGCTTTAGATGCAGTGTGGCAGTCCTGGCTTCGCG  
ATCTGGAGTTGCCGGAGTTTCTTCTGGTGGTTTGGACTA

>RXA02049  
GTGCGCTATCTGACGCTGGCCACAATCATCGCAGGTCTCTCCGGGTTCGTCGTCATCATC  
ATCGCTGCTGGGCCCTTGGTGATTCCAGCCAACCTTCCGAAGAATTCACCGCCTACTGG  
GGTCTGTTCTTTGCAGGAACCGGAGTGCTGACTGGGTTGACGCAGGAGACGACCCGCGCG  
GTGACGGCCGGTTCTCGTGGTGGTTCTCGTGGTGGGCGTGCTGGTTCTGTTGTTGGATTT  
AGGCCGTTTTTGTTTAGCTTCGTGGTTGCGGCGATAGTGCTCGTGGTGCTTGGCGCTTCG

GCGCCGCTGTGGATCGGCCAGCTTTTAAGTAATTTGCAAGGTGTTGGTGTGGGCTACTT  
GCTGTAGGTCTTGCTAGCTACGCGATCCAAGCGACAATCTCCGGCATTTTGTCCGGCTG  
CCAATTGTGGAAGAGTATGCCTCGC

>RXA02049-downstream  
TGATTTCTTTGGACACCGGCGTG

>RXA02050-upstream  
CGCGCTCCCCCTGCTGGTTCGCTGCAGCAATTCCAATCGGCGATCATCGTTCGTTTTGTC  
AAAGGTACCGTCCGGTCCATTGAAACTTTGGCGGGTCCG

>RXA02050  
TTGGCAATTGTGTGGGCAGTCGGACTTGTGGAGCTGGTCTTGCATGGTTAGTTGGCCCA  
TGGATCCTGGACGTTGTACTCCAAAAGGAACCTTTCGCGGTCCCTGGCTGGCTACTCGCG  
ATGCTCACCTTAGGCGCCACCACCACCGCTTCATTGATGGTGTCCGGCTGCGCGGCGATC  
GCCTTTGAACGTCACGGGATCTATCTCACCGGATGGGTGTTGCCACTGTTGTTGCCGTC  
GGATTCTTGCTGGGACCTTTTGATTTGGGCGTCGCTGCTGGCCTTGCCTCATTTGTTGGC  
CCACTCTGCGGTTTGTGTTACACATGGGAGCGTTTGTGGTGGGGATCGGAATCGGGTT  
TTGACTGCGGGA

>RXA02050-downstream  
TAGTTTGGTTTGATTGGGGGATT

>RXA02051-upstream  
CGCACTGATCGGTGTAGTAACCTGGCGGTATTTTGCTGCTAATTAACTCGAAAACGGTGA  
GCAGACATCATCTTCAACTCGCACAAACAGTCAATGACTCC

>RXA02051  
ATGGTCATCAGAGCTCTCCAGCGCGAAGAAGAAATCGTCCTTCTCAGCGCCGGAGCACTT  
GGAATCCATGAGAAAACCGTTGAACGTACAATTCGTGGAAAACGTATTCCTGGCACGCAA  
AAGACCGTGACGTTCCAATACAGCTACACCGGAAAACCTCGGAATCGATGCCTCAGATGTT  
GAAATCAAATCCGCAGGTGACAATAAGCTTTCATCACTATCCCTGAGTTCATCTTCATC  
GGATACGACGATCTAAAGTTTAAGACCATAGCCGAAGATGACGGTTGGATCAGTTTCAGC  
ACTGACGATATCGATACTGCAGAAGTAGTTTCTGAGATCATGAGCCAAGAGAACTTCGTC  
GAGCAAGTAACCACTAACCGGGAATGTTGGAAGATCAAGCGGTGATTTCTACAACGAC  
CTGCTCCACGAATTCACCGAGAACTCGATACAGATCGATACGAAGACACCAAGATTGAG  
CTCGAATTCGAGTTTGAG

>RXA02051-downstream  
TAGATAGTGCTTCGAAGACAGTT

>RXA02053-upstream  
AACCAGCCAGAACTATCTCCAAAAGCTAATAAAACCCTTGCACTGACAAATAAGGCGAC  
CTACCATGACTCTGTTTCCAACACATAAAAAGGATAAAAA

>RXA02053  
ATGTCACTTTCAGTCGTCGAGGCGATTACCAACCGCCGCGCCACCCGCAAATACACCGAT  
GAAGCTCCTACCCCTGAGCTGATCGACAAAATCGTTGACCTTGCCCTGGAGGCACCCAGT  
GCGTTCAATGCGCAGCAACGTGAAATTGTTGATTAAGTATGATCCCGCACAGAAGCAGAAG  
CTTTACGAGGCCCTCCCATCAGAAACAATTCCTCACCGCACCTGTAACCTTTCATTGCGGTT  
GCCCCGCTGGAACGAGCCTGAGGATTTGGAAGAGATTCTTGGTACGGAAGGGCTGAA  
CGTGTGCGGGGATTCATCAACGGTCGCAGCATTCAGCAGGCACGGAAGCAACGTTGAGG  
GATGCCAGCCTCGCGGCGGCTTTCTAATTCGCTGCGGAGGCGGAGGGTTTGAGTACC  
AGCCCGACTACTGGTTGGGATGAGGAAAAAGTGAAGGAAGCAATCGGTCTCGGCGGGCGT  
GAGGATCGTGCAATCGCCCTTGTTATTGCTACCGGATTCCCTAATGAACAGCCGGAGCAC  
CCTGGTCGTTTGAGAAATAGGCGCATCGACAACAGCTAC

>RXA02053-downstream

TAACTCTGCCAGCTCGCCCGGAC

>RXA02057-upstream

AAGTCTTTATAGTCTGCACTAGCCTAGAAGGGCCTTATGCCGTGTGAATCACACAGCAT  
ACGGCCCTTTTGTGCTGCCGTGGTTGCCTAAGGTGGAAGGT

>RXA02057

ATGAAACGAATCTGTGCGGTGCGGATCTCTTCAGTACTTTTGTTAAGTGGCTGCTCCTCC  
ACTTCCACAACGCAGCTCGAGGGATTTCGATGGACGCTCAGCGCAGGAGATCATCACAGAA  
CTTGATCAAACCCAGTCGCAGACAGAGCAACTAACCTCATGGCCTCCATTTCGGGCAGAT  
GAGTTAATTCTGTGCGATCAAAGCGGACAGCTCAGCATTGACATGCCCTGCAGATGAGTTC  
TATATCTCCGCAGCCCCGTACACCACCACAACCCACGAGTGCTTCTATCACAGCCTCACC  
ACATGTACTGGTGAACCTCGCCAACACCCAGTGAAAGTAACGGTGGTGGCAGATAATGGA  
GAAACCATCCTCGAAGAGGACACCATCACCTACGATAATGGATTGTTGGGATGTGGCTC  
CCCCGCAACATTGATGCCACACTCACCATCGAACATGACGGCCTGAAATCCACCCAGCCG  
ATCTCTACGGGTGATGACGCCCCACGTGCATCACACGGCTGAAC TAGCG

>RXA02057-downstream

TGAAAATCCTTTAGACAATAAGA

>RXA02058-upstream

GAAGCGGATTTTAGTCCTTGCGCTTGGTGCCTCGGTAGCGGGATGCTCAACGCTTTCCCA  
AGAACCTTCACCACCTGTTCCGTTGGGAAACGTTGATACT

>RXA02058

GTGCAGATTGTCTCTCCCAATGGGGAGATTGAGTCTTTTGTGCTGGGGAAGCTGTATGAG  
ACCGCATTAGTGGAACGTGGCAGATCTGCATCAGTTCAGCTGATTGACGGCGACTTGGAT  
GAGCAACTATCTATGCTGCGAGATGACAGCACTGATTTGGTGATTGCTTGCTCAGGACAA  
TTACTGGAATATTACAACCCAGATTTAGCCTCCGAGTTTGCCGTCGAATACGCTAATCAG  
ACAGCCTTTGATAAAAACTCTGGTGAATGGCGCGAAAAAGTCTACGATGCTCTCCAAGGA  
TCGCTGCCGGACTCCATCGTGGCCACCGATCCTTCCAATGCTATTGGTTGTAAGGACGAT  
ACGTGCGTGCCTCAAAACATCGTGCCAATTTATAGAAAGCCCAATCTGGATAGGGACAAT  
CGGGACACCCCTGAAC TTTGTGAGCGGTTCTTTGGGTACAAGCGATTTGGAAGCATTGGTC  
AAGGACGCCCAAACAACAGGCACAACCTCTGAAACTGCGCTGGATTTCTTATTGTCTAAA  
GGATTTTCACGC

>RXA02058-downstream

TAGTTCAGCCGTGGTGATGCACG

>RXA02059-upstream

TCGGGAAATTCCACTCATGAACGCCTAGTCTACGGGAACCATTTACCAGCGGTGTACGTT  
GTAAATGTGAAGTGA AAAAGTGA AAAAGGAAGATGATAAAG

>RXA02059

ATGACTCAACCACGGCCCGATGCCGCATCTGTGTGCTGGA AAAAGAAGCGCC CAGAAGGA  
TGGCCAGTGGGAAGCTTTGAAACATACCCAGAAGCCCAAGCAGCAGTGGATTGCTCAGT  
GATAATGCATTCCCCGTCACCGAATTGACCATTTGTTGGTGTGGACCTGATTGAAGTGGAA  
CGCGTTACAGGTCGTCTCACGTGGGGTCGTGTGATTGCCGGAGGAATGGCATCTGGCGCA  
TGGTTGGGTCTGTTCTTTGGCATTGTCTATGGCCTTGATGTCTGGATTCTGGTTCTCTTCC  
ATCGCAGCGGGAATAGGTATGGGTTTGGTGTTTGGCATTGTGCGGTGCAGCAGTTCCTTAT  
GCTGCTTCCAAAGGCAAGCGGGACTTTACCTCTTCAACTCAAATTGTGGCGGGGCGCTAT  
GATGTGATTTGTTCCCCAGAACGTGCTCGGGAAGCTCGAGACATGATTGCCCTGAAAAC T  
CGAGATCTCCGCCAA

>RXA02059-downstream

TAAGTTAAACTAACGCCTATGAA

>RXA02066-upstream

GGAACCTATCACAGGCGACATCCGTTTTGAGTAGTAGGTATCTTGGATAAGAAGTTACCC  
ACATCCTTGAAAGTCGAGACACAGGAGGTCATCGGAAGAT

>RXA02066

ATGTTCAATTCCGACACCACCGCAATCTCCAAGCTAAAAGTCGAGATCGTGCAGGATCT  
AAAGCAAAGCGCAGCAGGCCAAGTTTTGATTTCAGTAGCGCGGGATGTTTTGGATGTTTCA  
ACAAAAACAGCACAAAGTTAAAAACAAGGCTAAAGAGTTTCTCTGTTGATCACCTTTCA  
GCAGACGCCCGCAGCCATGTTTTGTAGACAATGAACGTGTCCTGGCGCCATGCATCGCGCC  
AGGCTGCACATTGTGCACTGCGCTGAATGTAGGGAAGAGATTAACCGTCAGCGGGAACCC  
GTTGATTATCTCCGCTCAGAGTGCAAAAACGAAGAAGTGTCCGCCCCAATGGACCTCAA  
GCACGGCTTGCCAGCCTCGCCACTGAGTGCATGCCTGGCCCTGGCGCAGAGAATTTAGCA  
ATGCAGCGCCCAAGAGTCTTTTGTGGCTAAAGTTGAGTCCGTAGTGCAGCGAGTTTCGTAAG  
AACCAAGGCCCGC

>RXA02066-downstream

TAATTTTAAATCCTTATTTACAT

>RXA02067-upstream

TAAAGTTGAGTCCGTAGTGCGCGAGTTCGTAAGAACCAAGGCCGCTAATTTTAAATCCT  
TATTTACATTTCTGAAAGACCGGTCTGATGTTTTCTAGC

>RXA02067

GTGGGTTGGGGAGAGATCTTCTCTTAGTCGTTGTGGGCCTTGTGTCATCGGCCCCGAA  
CGGTTGCCTCGTTTGATCCAGGACGCACGCGCTGCGCTGCTCGCTGCACGTACCGCTATC  
GACAATGCAAGCAGTCGTTGGACAGTGATTTTGGTTCCGAATTTGATGAAATCCGAAAG  
CCACTAACCCAGGTTGCACAGTACAGCCGGATGAGCCCCAAGACGGCCATCACTAAGGCG  
TTATTTGATAATGATTCCTCGTTTCTGGATGACTTTGATCCAAAGAAGATCATGGCCGAA  
GGAACAGAAGGCCAAGCTCAGCGCAACAAGCAGGCAGCTGACAACAATGCGAATGTGGTG  
GAACGTCCAGCTGATGGTTCCACCGCACGCCCAACGCAAAACGATCCAAAGACGGCCCG  
AATTACTCAGGTGGCGTCTCTTGGACCGATATTATT

>RXA02067-downstream

TAGCTTTTATTTAACGCCAAGCC

>RXA02069-upstream

CGCCATCTGCTTGGTGCCGTAGCTGTGATGACTTGCTCGACCACATGCTGCCAGAAGAC  
TGGCGCGACGCCGAATCCGACCAGGAAAGGAGCACACCC

>RXA02069

ATGGCTGATTTCAACCGCTCTGAATTAGACAGCCCACTTTTTGGATCCCGCAAACGATTT  
AAATTCGACGATGACACCATTTGGTGCCTACGCCGAAAAAGTAGCCCGGTTCTTTGGCACG  
GGACAGTACCTGTTTTGGCAAACCATTTTCGTGGTGGTGTGGATTTTCTCAACATCGGT  
GGTTGGGCCTGGAGTTGGGACCCCTACCCCTTCATCCTGCTCAACCTGGCATTCTCCACG  
CAGGCTGCTTATGCTGCTCCGCTGATCCTGTTGGCGCAAAACCGTCAAGAAGACCGCGAT  
AAGCACACCATTTTGGCGGATCGTCGGCGTGCTGAAGAGACAAAAGCCGATACTGAATTC  
CTCGCACGGGAACTCGCAGGCGTTTCGCTTAGCCTTGGGAGATACTGTACACGTGACTAT  
TTGCGCCATGAGTTAGAAGATCTCCGCGGACTTCTTGACCGCATTTGAAGCCAAGCTCGAC  
GACGAGGCAGCGTCCCGTATTGCAGACCGCCACGAACAGCACGGATCAGGACCTCAAGAT  
TTGTCTGACCCCACTCAGGGTGATGTTGCAGACGAATTT

>RXA02069-downstream

TAGGGAGTATCAAACTTGGGAC

>RXA02070-upstream

AGCACGGATCAGGACCTCAAGATTTGTCTGACCCCACTCAGGGTGATGTTGCAGACGAAT  
TTTAGGGAGTATCAAACTTGGGACTACTATCGATACGTG

>RXA02070  
 ATGACTCAAGTAACCGAATCCGCTGTCCGCGAGCGGCTATCCCGCGTAGAGGATCCAGAG  
 ATCGGTAAGCCCATCACAGAGCTCGGCATGGTCAAATCAGTGTCCATCGACGGCTCTGAT  
 GTCCAGGTGGAGGTCTACCTGACGATCGCGGCTTGCCCGATGAAAACCACCATTGTCACC  
 AACACTGAAGCAGCTCTCAAAGACATCGACGGGGTTGGCCAAAGTTCATGTCACCACCGAT  
 GTCATGAGTGATGAACAGCGCCGTGCGCTCCGCGTCTCCCTGCGCGGTGAAACTTCTGAG  
 CCAGTGATTCCATTCGCTCAGCCTGGTTCCACTACCCGCGTTTACGCTGTTGCTTCCGGC  
 AAAGGTGGCGTAGGAAAAATCTCCATGACGGTGAACCTGGCTGCAGCCCTAGCCAAGCGC  
 GGGCTGTCTGTGGGAATTTTGGATGCCGATATTTACGGACACTCAGTGCCCGGAATGCTC  
 GGCTCGGACCAACGCCCACACCAGGTGATGACATGATCATGCCTCCCCAGGCGCACGGC  
 GTGAAGATGATATCCATTGCTCACTTCACCGAAGGAAATGCTCCTGTGGTGTGGCGTGGA  
 CCAATGCTGCACCGTGCCATCCAGCAATTCCTCACTGACGTGTTCTGGGGCGACCTGGAT  
 ATTTTGCTGCTGGATCTTCTCCAGGAAGTGGTGACATCGCCATCACCGTTGCCCAATTG  
 ATCCCGAATGCTGAGTTGCTCATTGTGACCACTCCTCAGGCTGCCGCGAGCTGAGGTTGCC  
 GAGCGAGCAGGAACGATCTCTGTGACAGCAACAGAAAGGTTGCTGGCGTGATTGAAAAC  
 ATGCTGCCATGGTGCTTCTTGATGGCACCACCATGGATGTTTTCGGCACCGGCGGGCGGT  
 CAAAAGATTGCTGATCGTCTTACCCTGTGACAGGTGAAGAGGTCAAGGTTATCGGATCT  
 GTTCCATTGGATCCGAACCTGCGTATCGGTGGCGATGTGGGAAATCCTATTGCGATTTCT  
 GAACCACACTCCCCAACCGCTGCAGCGATCAATGAGATCGCTGAACACCTAGCTCACCGC  
 AAGGTATCGCCACCAAA

>RXA02070-downstream  
 TGACCCAGAACCACACCGCAAAC

>RXA02071-upstream  
 CATGGATTCCCATTGAGCCTTATTTACACAGGCCACCTGGCTTGTTTCCCACCGCGAT  
 GTGCCACAATAACGCCATAACAGAAAGGCATACTGACACA

>RXA02071  
 ATGTCCAACCTCCCCACCGACGTTTCAACGAGCGCACCTCGAATTATGATCGCGCCAGAT  
 TCCTACAAAGGAACCGCTACCGCATCAGAAGCTGCGCAATACTTAGGCGAAGGCGTGTG  
 GAAATTTTGGCCCAACGCCCTCCATTACGTTGGCACCCATGGCCGACGGTGGCGAAGGAAC  
 TCCTCAGTTTTTCGGCGGGCAGGTCATAACATTACCCACGACAAATGCCGCGGGACGCCTC  
 ACCGAAGCCAGCTACACCTTAGATTCCGAAACAAACACTGCCTACATTGACATCGCCGCA  
 GCCTCCGGTTTGGCCGCCGTGACAGATCTAGTCCCCACCACCGGCGATACCTACGGC  
 ACCGGCGTTTTGATCGCAGACGCGGTACCCGTGGCGCAACTCGCATTGCTTTAGGCCTT  
 GGCGGATCAGCCACAACCTGACGCCGGCTCAGGA

>RXA02076-upstream  
 TAGTTTCCAAGAAACCATTTAGGCTTTTTTACCTTTCCGTCTAGCGATCCTCATCTGATG  
 TATGTAGTCACGATGAGGTACGAGTAGGATCTTCCTGGTC

>RXA02076  
 ATGAAATCTCCATTTATTTTTGATGTGCGCCGCACTCCTTCGTGGAAGTGCCCTTCCGGAA  
 CACCTCACCCAATCAGGTCCAAGCCCAGCCGCATTGGTCCGGAATGATCGCGATCCCC  
 GAGGGCGGAAAAGTTATCGTAGAAGCCCAGATCATTCCTCAGGTGGAGGCCTGGCCGTC  
 GAAGCAGATATCGAAGCGCAGCTTCTGGGACAGTGCTCCCGCTGCCTCCGCGAACTCACC  
 CCAACCAAGACGCTGCACGCTCTCTGAGGTTTTTGCTGCCGATCCAGACTTTGTTACTGGT  
 GAAGATGCAGCAGATGACGAAGATGAGCTGCCAATGGTTAACCAAGACCAGATTGATCTG  
 CTTCAGTCTGTCAATTGATGAAGCTGGTCTGACCTTGCCGTTTAACCCTGTCTGCGAAGAA  
 CTTGGGTACGGCGCATGCCAGGATGATGAAACGCCAGCTCCTGACGGTGTCTCTGAAGAA  
 GTAGAAGACGAGGAAAAGGTGATCCGCGCTGGGCTGGTTTGGAGAAGTTCCTG

>RXA02076-downstream  
 TGAGCAGGAAAAAGAATCGCCTC

>RXA02080-upstream  
 CGTAAATTCGAAGCGAGCTTCTAATTCTAGCAAGCTTGGTGATGGAGTATCCTGCCAAAA

TTTGTCTGTGCTTATTGTGCAGGAATTCGGAGGCGGAC

>RXA02080

ATGTCAATCGAGTGGTTACAAATTGTTGAATTAGGAGCGATCTTTGGTGCAGGTTTCCTC  
GCAGGAAGCATCAATGTAATTGTCTGGAGCAGGAACATTAGTGTCTGTTTCTATTCTCGTG  
TTCTTGGGCTTCCACCGTTGACTGCCACCATCGCCAACACCATCGGCATCGTTCTCTGGA  
AGTATTTTCGGGTGTGGTTGCTTATAGACGTGAACACACGCCCATGTAAAAACCATCAGA  
TTTCTGTGCTGCCAGCATCAATCCTCGGAGGGATCACCGGCGCCTCGCTCTTGCTGCATTTT  
TCCGCAGATGTTTTTACAGCAGTAATTCCTGGCTGATTGGATTTCGGCACGCTGTTGGTT  
ATCGCAGGTCCATCAATTAAGAAGCATGTTGGCGCTCATACTTCAGGTGGCATCTCTGCT  
GGGTTTAGGCAATTGCCTTTCCCGAGCCGAACCACCTTCATCGTCTCAGTATGTGGTGCC  
CTGTTGCTGGGCATGTATGGAGGTACTTCAGCGCAGCTCAAGGCATTCCTCTCATCGCA  
TTGCTTGGCATCACATCAACGCTGCAGATGCAGGAACCAACGCCATCAAAAACCTCACA  
GTGGCGGCAGTTAATCTCATCGCAGCCAGTGTTTTTATAATCATCTCCCTGAGTTGATC  
TCCTGGCCGACCGTTGCCTTAATCGCGCTTGGCTCAGCTTTAGGTGGATACATCGGCGGA  
CGGTACGCCCGCCGACTTCGCCCCAGTGTTTTTAGAGCATTGTGTGGTCATCGTCGGAATC  
ACCACGGTCATCGTTATGACGATCGGT

>RXA02080-downstream

TAATGCAGCAGACTAGTAACCCC

>RXA02081-upstream

CCTGGATGATGTCACGTCTTAAATCCGGTATACGCAGATGATTGTGGGAAGATCCGGA  
AGCTCAACATAATTTGCGGTGCCACCGGTACAAAAACAT

>RXA02081

ATGACGTTAAGTGGCTTGGAGCTTTTAGAGTTCGAGCGTCGAACAGCTGCGATGGAAACC  
AGGCTTGGTCGGCATAATCGGGGAGCGGGTGGCGCATTTCTTGAGGCGGTGGTGTCTCGA  
AGCGTGGAGTTGCCACTTTTTGTACAGGCCCGGAATTTCTCAACAATCAGCAGATCAGA  
GCTCAAGTGCATCGCCGTATTTTGGAGCAGCTTCCAACCGAGGGAGAGATTGTGCTGTTG  
GGGCACAGTTTGGGGTGGTAAATTGCTGCAGACCTTTTGAGGCGATTGCCGCCAGAGCTT  
ACGGTGAAGGGATTTGTACCATCGGTAGTCCGTTGGCAAATGGTCAATTCAATGTGGAT  
GATTTGTTTAAAGTTGCTGCGCACGCCGTTGAGCAATGTGTCGTGGTGGGTGAATTTTTGG  
AGTGGATCTGATCCTGTTGCAGCAAAACGCGGAGTGTCCGTGGCTGTTCCGTGGGTATTG  
GATTTTCGTGTGAAAACCTCACTGGTCCCAGGCCCTGGGCATTCTTCGCGGGAATACTGT  
GCCAATGATGCAGTGGCGGAAGCAATTGGGTTTGGGCTGTTTCGGATCGCGCAGCAAAGAA  
ATCGTCTCTTGGCGAGAAAAATCTGCAGATTCCGCTCAATGACGCGGAGATTTTTGTGCTG  
CAGGCGCTGCGTTATTGTTACCTCATTTTGCAACGGCTCAAAGGCGATGAAGCCTTAAGG  
TATGATACGCACTTCGGGAGACTCAGGATCGCCTGATTGAGGAGATTAAATCCAGAAAC  
GCCGAAGAGGCGCGCGATTCCGAAGGAAATCGCACGCCCTGGATTTTGATAACGGTGAT  
CCAAACGCAGCAGCTCCTGTTCCAGGTTTGGAGCCCATTTATGCCCAAAGAGCAGGCAATT  
GAGCGGCTTTTAGAGATCATTGGACAGAACCTGCTGCTGCCCTTTGAGATCGAGGTGCCG  
GAGAAAAATCAGCGGAAGCACTGAGGGATTTACGGCGGAAACTCAATTGGGTTCCACC  
GTGGGCGCTGATATTTTTGATGCATTGCAAATGGCTGTTGGGGTGGTGTGCGGAAGCGCG  
AAGAGCAATTGGCGCAAATGGGGAGCGTTTGGTGTGGGGGCTGCAGCTTTGACCGCTGCA  
ACGGGTGGTTTGGCTTTGGCGGCTGTGCCGACTGTTGCTGGAGTAGCCACTGTTGCCTCG  
ACACTCGCAGCATTTGGTCCAGGTGGGATGATGGGCGGTTTGGTCACTGCAGGAACACTG  
CTCACAGTTGGTGGCGGCAGTTTAACCGCTGGGGTGTGAGCTCGGTGAACACCACGGAA  
GAGATCGAAGCGCTCGTTGTACAGAAGCTAAGTTTGGCTATTTTGTGGCAGCGCCATGAG  
ATAGATAGAATCATGAGGTGTGGGAAGAATTCGCGGAGGCAGAACGTCTGATTGTGCGG  
GAGCACACGCGTGTGAAAAACGTGTGCGATAGTTCTTCGCCCATTGTGAAAGCTTTCGAG  
CAGCAGCGTTCGACTATTGAGCGGGCGTTGAAGTATTTGAGCGATCATGGGATGGAACCT  
GGCTGGTTTGAAGAACTGGAACCAACAGCCCCAACACCGTTTCTAAAACTGCGGGCTAAG  
AAAACGTAT

>RXA02081-downstream

TAGGAGAAACACAATGGAGAAAG

>RXA02084-upstream

CGTTGATGGTTGGGTGGTGGGTCACAGTTTAGAAAAAGTGACTTCAAATCACGTCGAAAA  
GAAATTGAAAGTACTTAAGAAACATGTCACGCTAGGAGAC

>RXA02084

GTGATAATCATTGCAAGCGTTGTTTTCTCCTCGTTGGCGCAATGTTGGCGAATGCTGCC  
GCTGCGCTCTTTAGTGCCAGCGAGCCATTTCGGACGAATTTCTACCTCATTGGCCTACCT  
AACGAAGACGACTTCGTGCCGTACTCAGTTCGTTGGCCTTTTCCCACTGATGCTC  
TCCGCATCGATGGCAGCATCCTTCTTCGGGGTGTGGGCAGTACTAATCATTCCTTTTCGGT  
TACTTCCCATCACTGATGATGGTTCATAAGCACAAAGCAGGTACAGCGAACCTGGGAT  
TCCGTACCCGTTGCTGACTTCTACGAGGATTCCACCCCTCTGGTC

>RXA02084-downstream

TAATTTTCGATTTCTAAATGTCAT

>RXA02089-upstream

CTAGCTGACCAGTATTAATACCAATAATAGAACATATTATCGAACAAATGTCGCTTGGGTG  
CTCTACACTTCCCACTATGATCAAACACCGAAACCGCCTA

>RXA02089

ATGTCTTCCATCTACTCCGCAACTCGCTACGCCGCCCACTTCAAAAAGCGTCTTCCCCACC  
GCCCTGGATGACATTCAATCCATGATGCGCCACCCTCGATCACTGGCCAGAGCCATACCC  
ACGTGGCGCCCCGCGAGCATCCCCGTACCGTCACTTCCCGCGAAGATCCCCTCACCCCTC  
ACCTTGTCACGTCACCGCGCAGGCCCGCCGCCGCCAAATCATCCGCGAGTTCGGTGAG  
CAACGTGAACCCCGCTATCTCATCACCATCCGCATCACCAGCCCAGAGGGCTTCAAAGTA  
TCCACCCGCTCGCCGAAGGCTGGATCCGCGCAATTCTCAGCACCGCGCACAGCGGCACT  
GTCCACCAGCTCACCGATGAGCCGGCACCGACGTTTTGCTGGCTTGTCGACGCCCACTTT  
GATCCGGTGCGTTCCCTTCTCTTTTTCGAATATTCCAAAAGTGCAGCC

>RXA02089-downstream

TAGAAAATGACGAAACCCCTGGAT

>RXA02090-upstream

AGGTGAAAGGCTAGGCGCGGATTTCGTTGTGGACGCTAGGCTTGTGGGCAGTGTCTTTGGG  
GGACGTCCCCAGCACAAACCAGATGGAAGGTCATCAGAAC

>RXA02090

ATGAGCTTTTTTGAGGACATCGCGGCTGGACTTGATAGTGACGGTATCGAGTCCCGCGTA  
AACGGCGACACAATGTTTCGTTCCGATCACCTCTGACTTGGAAATCCAGTTCGTGGAGATC  
GATTCCTCTTACCTGCAGCAAACGTTTATATCGCTGCAGCCAATGTTGATGAAGACGAT  
GATGAGTTCGAGGCGAGTTCTCGTTTCGGTGGTGTCTCTGTGAGGATGCTGTCGCTGCT  
GTGCGAAAAGCATGTTGCTACTGATCAGGTGGTGAAGTGTGCTGCGTGATCTACTTGAAGGA  
ACTGATGAACGCATCCAGGATTTGGAGTTTTTCCAGGATGCAGTGAATGCAAATTTGGTT  
CGTGCGGAAGTCGGCCAGAATTCTGAGCTTCAGGTTTTGGTTCGAGGTTGAAGACGGCGTC  
CCAACCGCAACGGTCAATTTTCATCGCGATCGGTGAGTCCTTTGAAGATCTGATTGATCAG  
GCCATTGAAGAAATGTTGGGAATCCGACGGCGACGCAGTTCATCGGATGAAGATCGCCAA  
CGCATGTTTCGCTGATTTGACCTCCGAGTTGGAATTTGTCACTGATGAAGTCCTCGACTTG  
GGTACCTTCACTGATTTTGATCGACTTTTCGATATCCTTTCCCTCGCCGATGACCAGGCT  
GAGGATTGGGAAGCACAGCTCGTTCTTTTTCGAGGACGAGGAATTTGATGAGCCGGATGTT  
TATGACCTTTTCGTCGATGACTCTGAAGAAGATGACGACGACCTCGATGATGACGAGGAC  
GATGAGGATGATGACGAAGAC

>RXA02090-downstream

TAGATTTTAGCCTTTGTGCGCGT

>RXA02091-upstream

AGATCTAGCCAACGAACCTGATTTTCATCGAGCCGGAAGAGACAGAAGAAGAGCAGCAATT  
GAAGTGGCTTAGCCTTATGCAGTTTTTTTGAAGTAGATAA



>RXA02091

ATGAGCATCTGGAAACGTCTGTTAGTGCAGTACCCGCGCTTCGCCGACACCCTCACAGCC  
GGCCAACCCATCACGCTCGAGGAATTAGCAACCCCGGAAGTGATCTTGGAAGCTGTTGCC  
AAAGGCCAAGAAATTTTCGGCATTTGAGCAGCCAAAACATGCAGCACAACTCTGGTTTCAC  
TCCCTGTGCACCGCAATTGTGCGCCCCGCCGTACCGCCATGGTGGAATTCGATGTCATC  
CCCAGCCTCGACATACGTGAGGTCAGCTGCATAACATCGACGGTACTGGTTCCGGCTTC  
AGGCCGAGGAGATGCTTGTGACGCCCTCCCTCCACCTGTCGGGCACCCAATTCGGCGAG  
AGTATCCGCGTGGTGATTGATGCATTTATGCGCTGCCACGGATCTGCGACCGGCACCCCTG  
TGGGCGGTTGCCTCAGATGCGTTGGGAATCGCAGCTAGCGGCGCAGGTGTCGAGGCC'TTT  
GAAGAAGAACATGCCCCGCGAGGTGGCGGAAGCCCTCATTGAAGGAATGAATAGTGTGAAC  
TCAGTTCCATCGCCGCGGTTTAACGACGACGATTATTTTCATTGAGCTGGATGCTGCATG  
ATTTTCCACTCACCACGAGCTGATTTTTCACGCTCGTGCCACAGAAGAGG

>RXA02091-downstream

TGAAAGGCTAGGCGCGGATTTCGT

>RXA02094-upstream

TTCCACCTCTACACCGGAGTTCTTCCAACCAACGACCAGATCATTGCTGCGGAGGAGTTC  
TCCAAGTAAATTTCTCTCCCTATTTTTAGGAGGCACCAC

>RXA02094

ATGGCTGAACACAACGCCATCATCACGGATGCAGTACATTCCGACCCCGCTGTTTTAGAA  
GACAACGCCGGGTTACAGCGGAAAGTACCTAATCCGTGCCCTGGACAAGGCAGCTCATATG  
CAAACAGGTGCCATCGAGGGATACATTTCTTGGCTTCGGAAGCACAACTCTGAGAAAACA  
CCGGCGCAGCTGCAGGTACTCGTCGACAAGCATTTTATGCGCCTTGCCACCGGCTCTGGC  
GCTGGTGTGGGCATGGCTGCGGCCGTGCCAGGCATTGGCTTTGTCACGGGTGCTCTTGCC  
GTTGGTGTGAATCGTTGGTGTTTTTGGATGCTGCTGCGTTTTACACCATGGCATCCGCG  
CACCTGCGTGGCATCGACATCCGCCATCCTGAACGCCGACGTGGTTTGATTTTGGTGGTT  
CTGCTGGGCACCGCAGGCAAGCCATTGT'TGACGCAGGCGTCGGTGATTTATCCAAGAAA  
AACCACGCGCCGGGCATTGCGATTTCCCGGTTTAATATCGGTGGCTTGATGGAAGTCAAC  
GGCCGACTGATGCGCTACGCAGTGAAGGAAGTAAGCAAGCGTTTCCGTTCCGGCATTGATT  
GGCAAAATTTCTGCCGTTTGGTATCGGTGCGGTGCTGGGCACGATGGCCAACCGCAAAAT  
GCCAAGAGGACTGTGCGAAACGCATACGACTCTCTTGGTCCTCTCCCCACCCATTTT

>RXA02094-downstream

TAAGTACTCAAGACCCCTTCCAAC

>RXA02097-upstream

TTGGCTACAGATGTTTCAGCGCTTGCAAGTGGGGTAGTGTGTTTAAACATCACAATTAGTT  
CTAGAGGAAAACGCATTTTTTGCAGCGGGGAGAGTGATATAC

>RXA02097

ATGCCGGCTGGCATCGCAGACATGACAGATTCATTGCTCGGATGGGCATCACAAACTGAG  
CTGGATCTGAACCAGCGTCTTGCAAGGGGTAGAGTACTTTCCACAAATTCAGCTGCGACAC  
GATGAGCTCGAGCGCATTCATCGGTTTTACGGCACCTTTTTGTCCCGCCAGGTAGGCGCG  
GGCGCAAGCCTTGGGGATCTTTTTGAAATGACCCCATGCCTGACAGTCACCACCTTGGTG  
TCTCGGGCGTCACGGATCAGCGATCCAGCAGATTCTTCGGTGAATACATCGGAGGACTG  
GGACTTAGCGCAGAACACGCAGCAGTTGTTGAAGGGTTGACCGAAAAGCTCTTCGCACAG  
GCTGGCCTGCTCGTTCTGAGGGAATTGCATCTCCATTGGAGTTGTTATCCATCCACGCA  
GGCATTAGTAACCACGAAGTGGCCGAGTGCTGACCGAAGTGGAACCGGCACCACCGAA  
TATCCATTATGTTTCGACGCTGTCTGCGCCTAACCCCTGAGTGGGCACAGACCCTTATC  
GGCGGAGTTCAAGAACTCATTGAATTTGCCACCACCCACCGAATCTTGGTCAGACCGC  
CAGCGCGAATCCTCACTGCCAGCCATGATCGATGAGATCGTTGTGGCGGAACCTCGGGAA  
CGCCCAGTTGGTACTGCCGACCGTGAAAACCTCCGTTGGTGTGGCACTTCGTGAGCTTCGC  
CCACGCTCATCCTGGATGCAGAACGCCGCAAGTCTGCCGTGCGTCTACCTGAACAGCGC  
GTCAGCGACGATGAAATCAACTGGCGAGTCAGCCTAGAAGGCACCACCGGATTTCTCC  
ACCCCGGAGCATGGGGCGATACTTCTGGATACTCCGAAGCCCTCGACATCACTGTCGAG  
CGTCAAAATCCGCGAAACACCGTCACCGACACCTCAAACCAATCACCTGGGTTGTCCCA  
GTCGTGGACTTCAACGACCCAGTGCTGGTGTTTTTCCGCGCGCGGTGAAAACCTCACCGAC

AAGGTCTCCCTGCACCATCAAGAGATTTACGTTCTCGCGCCAGCGGAAGCAAACTCGAA  
 GACATGGTCACTGGCCAGCCAGTACCAGTTATTGAGCAATTCCTCGTAGAGGGCTGGAAC  
 TCATGGGTGTGCTCCCGCTGGACGCCCGTGGCCTGTCTCTCTGAAGGTCAACAAAGAA  
 GTCCGATGCATTGACCCACGTGACGCGTTGCCTTCCACCACCCAGCCGAATTGGTCCCT  
 CACGTACGATCCATTTCGGACTCCCCGTACACGCGCAGTCCCTGATCGCCGAGTTCCCA  
 CCAACCCTGAGCGGACAAGACGAAACCTGGATGCTCTCCATCTCGGCTTTCGCAGGTGTA  
 GGCCTGTGCTGGTGAAGAAATCGCCGAGCCAGAGCCTTTGGAAGTCCCTGCCGACGGTGGC  
 CTTTTCGCCATCTTCGACCCAGAAATATACGACGCCCCATGGGTGGGTGAATACCTGGTC  
 CGACTCCGCGGGCCACGCAATGAATCCTTCCGACCCGAATTCGCCATCGTCGAAGACATG  
 ACCACGAATTCCGAAGTCGCCTCAGGTGCATCATTTTGAATCCCAACCACCCTGGTCTC  
 AGCGAAGCAGCCTACGCGTGCCTTCCGGTGAAAAGCACTTCACCGCAGAGCCACGCCTG  
 GTCACCGTTGAAGCAACCGACCCCAACGCATCATTCGTGGTCAACCACCGATGAAGGCGAT  
 CAAATGCCATTGCGATTGTGCCACCACAAATCGCCATCGAACTTCCACTGACCACCGAG  
 CCACCAACCTGGCGCGTCAACCGTACTGTCTGTGGACCACGCGACCTCGACGGTGCAGGC  
 GAACTCCGCATCCGCACCGGTGTGATGTGCGGATCCAAAGGTCAGTGTGCGCAACCAC  
 CACGGTTCAACACTGCGAACCCTGAAAATGGTCAACCCCTGACAACGGCCGTACCTGGATT  
 GCCAGCATGAAGGAAATCGCAGCCAGTACCTTTGTGATGCCACGCGGATCCATCGAATTT  
 GAGTGGACTGACCGCAAGGTTGACCGTCGCGTTTCCGTGACGATTGCTGTCATTGACAAA  
 ACTGAGAACCTTTACTGGCATCACCATCGAAGATGGAAGCTCGTATTCGAAGAAGCTCGCA  
 GCCGGTCGCCAACTCGCTGCATGGGTGTGGCCACAAACCGCACCGTGGGTAAAGCGCAGTG  
 GAACTTGCTGTCAACCGACAGAGCTGGAATCCCTGAAGTTCTCGTCGGCGCAGGCAAC  
 CTGATTGTTCAACTCCACACCGCTGACCCATTCACTACCTCCGTGACCCCACTGTACCA  
 GGAAAAGCTGCGGTCACCGTTGAGCAAGAAGGCTACTACTCAGCACAAACCGAAGAATAT  
 GCACAGCTTTCAGCATTCCTTCGGTGGGGAAGTAGAAGAACCACCAATCAGTGACGCTGTG  
 GTCCCCGCACTTTGGGATGTTTCCCATATCTGGACCGAACAGGGAAACACCGAGCATCTT  
 CCAGTAGTCCATGCCGCCCTGCGCTCCTCACCAGCCGACGACTGAAGGGTCTGTCCGCT  
 TCGCTGGTTCCCGCACAGGCACTACCTGGAAAAGTCATTTCTTCCGACTGGCAGCCTCA  
 CCGTTCAACACGGAATCACCAGCAACAGAAGTGACCCGACCGCATGGATCGGAACCCTG  
 CAACTCCTGGGTGCACTGCCAAGCGCATTTCAAGGAAGCCGAAGAGCTTGGCAACCGCACA  
 CCACTGCTGCCAATCCTCGGACAACCTTGAGGAAGTCGCCGGCAAGAATCCTGTCCACC  
 CTTGCAACTGGCCGTGACTCCACTTTGGACACCGCATGCATCGACCAATCCACCGTTGCG  
 ATTGCCGGCATGAACGAAACCCAGCAAAAAGCCCTGCTGGACATGTTCTTCAGCAACGCC  
 GACATCGTTCTTGGACCACTAATGGAAGACAACACCCGCCCTCATGGCAGTGTTCGAAACC  
 TTCAAGAAGCGGATGCATCCGTGAGGTTCTCCAGACTGAAGGCTTGATTAAGACCGCT  
 GTAGAATCTTCTCGTGCCATGCGTGGAACCCAGCGTCAGCTGTATTCTTCCGCACGTATT  
 CGATTGACAAAGCTCCGACAAATATGCTCTCCACTCCGCTGAGAAATCGCGCATCATCAT  
 CCAGTTGTGTCATGCTGTTTCGCGTTGTCTATCCCGTTTGCATGCACACGAATTGATCGGC  
 AAGACCCGAATCTCGATCGTGCATCTGCCGGTTGGGGTCGAATCGCTGATCTGGTGCCA  
 GACCTTGTACCCGGTGACTTGATCTCCGCGGAGGCAATGGTTTTGGGAGCTCGAAACCCA  
 GGACTCGTCGAT

>RXA02097-downstream  
 TAGTCCCTGATTCATCGGAGGG

>RXA02102-upstream  
 CGGTAAAACGTCCCGCTAGTGCGATGGAATCTGTGTGCGGGGACTAAAACATCAAACCTGAA  
 TCTTCGGCATAACACCACAGTAGACAATAGCCTTGTTGTT

>RXA02102  
 ATGACTAGCCCCCATTTCTTTTTCTGTCAACCCCATTCGCACCATGGCTGACGGCACGATC  
 AAACAGATTCAACCTTTACAGGCACCGAAGTGTGGACGGTCCCTGGGCGTGGAATCGA  
 CCTCTGTTACATCCCGCTTCTACGATCGTCGAATATCTGCACACGATCACACCTCTTAC  
 TGTGCTATTGTTTCCGACAAATATGCTCTCCACTCCGCTGAGAAATCGCGCATCATCAT  
 GATAGCTCCGGCGACTTTGACATCCTTCCCGGAGCATTGCCCTGGTGAGCTTTTCAGAAACC  
 ACTCCGGAATTTGACGAGTCCCAATCTGTTTGGAGATTGTCTCTTTTGAATACTGGCAC  
 CAGAAATTTGGTTTCGATATGGATTGAGAAACCGCCATGCGCATGGCGCAATACTGGCG  
 ATTCCAGAAGGTGCGCAACATGTTTTAGCCATTGTGCGCACCCGACTTTCTGCCGCTGGT  
 GAAGATCCCGCGCATGACCGATGGCGAGTTGTTAGAAAAGCTCCAGCTACTTTGCT  
 GGTGGTCATGACGTCATCATCGGACGCCGACACTTTGTGATGACGCAACCACAGTGAT  
 CAATTGGCCCTCATCTGGAACACTGACCGTTAAAGAGCATGAGGCGTTCATCCGCTGACT

GTTCGATGGCATCAGGGATTTGTACCACCGCAACCGTTACGCACCGTATGTAGTGGCGTTT  
 CAAAACCTGGTTGAAACCCGCCGGCGCGTCTTTTGACCATCTTCATAAACAGCTCGTCGCC  
 ATTGATGAACGCGGCCGACTTATTGCCGATGAACTGCATCATCTACGTGGCAATCCCAAT  
 ATGTACAACGAACCTGCTGTTGATTACGCCGATACCAACCTGATCATCGCGGAAAAC  
 GATCACGCCGTGGCCTTCGCAGGTTTCGGTCACCGCTACCCCAACCATGAGATTTACTCT  
 AAGTCCGCTATTCTGAACCCCTGGCTTCAAAGCGACGAGGAAATCCAAGCGATGAGCAAC  
 CTCATCCATGCATGCCATGCTGCAACCGCGCAGATGTACCCTGCAATGAGGGATGGGTA  
 CACAAACCAATCGATGTTGATATGCCAATGCCCTGGCATGTGATGATCAAATGGCGTGT  
 TCTACCCTGGCAGGTTTT

>RXA02102-downstream  
 TGAAGGTGGCACCAAGGTGTATC

>RXA02103-upstream  
 GAATCTGTTTGATCGTGCCGTCAGCCATGGTGCGAATGGGGGTGACAGAAAAAGAATGGG  
 GGCTAGTCATAACACCAAGGCTATTGTCTACTGTGGTGT

>RXA02103  
 ATGCCGAAGATTAGTTTGTATGTTTTAGTCCCCGACACAGATTCCATCGCACTAGCGGGA  
 CGTTTTTACCGTAGTCGCCAACCTTTTGATCGAAAAAGGCCTCATGGATCATGGCGTTGTT  
 GTCCATGATCCAGCAGCGAAAAATCGCAGAAGCTGTGGAAGAGCAGCTTCGCCAGACTTAC  
 CGCGACGAGCATGAAGATGCAGACTTGAAGAATCCTCGGTCAACCGTTACCTCATTGAA  
 GTTGATGGAGTTAAAGGCTCCGTTAACCAAGTGACCATGATTTTTGCCCGTTTGCTCACC  
 CCGCCAGCAGAGTTGCCAAAGGACGCTTTCCTCCTGGAGCAGGAACCTGCCTATGAAGTT  
 CCTGCAGTCTACCCATGGACTGTGGAGATCCTTCGC

>RXA02103-downstream  
 TAGTTTTGAGCTACGTATTCTTG

>RXA02104  
 CACGCCTGCGCCCAACTGGAAGTTGATGGCACAAAGCCAGGTATGGGCGCAGCCGGGGGC  
 ATTGCAATCGGACTGACGTGGCTGTCCACCCTCATGCACGGCAACGACCAACAGATCCAT  
 ATCCTCCCCGGCGCGCCACTGATTGCCCGCTCCAACGGAATCGAGGATGCGCTGCCAGAA  
 ACTGACTTGTGATCACCGGTGAAGGCCGACTAGATTCCCAATCGTTCACCGGAAAGGTT  
 GTGGGCACCCTCCACGGTTAGCTAAAGCCACGATGTGGATCTCGCTGTGCGGCCGGC  
 ATCGTGGAAGGCGGTATTCCCGATGATTTCTAGCGGTAGAAATGATTAAATCCTCCGAC  
 GTTGCAGCACAAATTACGTGATGCAGGCCGAAGGATCGCTCAAGAATACGTAGCTCAAAAC

>RXA02104-downstream  
 TAGCGAAGGATCTCCACAGTCCA

>RXA02107-upstream  
 AAGAAGTAGAGCTCAGCGATGAAGATTTGCGGGCAGGCCACGACCTAGTAAAAACCAAT  
 ACGCCACCGAGGAGTGGACTAAGCGAGTTCAATAGTTTCT

>RXA02107  
 ATGGATCTGCACAAGGTAGCTGCAGCGCACGCGGCGACTCTTCCCCCTGAGCACCAAAGAG  
 TTTCCTTTCGGACCCGAGCACGAAGTGTAACAAAGTGCGGGCAAGGTATTTTTGCTGCTC  
 ACGATACTAAATGATGAGCCGATTATCACGCTGAAATCAGACCCCGAGATTGGCGCTTCA  
 CTACGCAGTGGCTTCCCCACCATCCAGGCTGGATATCATGAACAAAGTGCCTGGCTG  
 AGCATTAGCGATGGTGAACGGATCACGAAAGACTTCATCGAAGGTCTCGTGGAAGAGTCC  
 TATGAACTGGTAATTTCCACCTTGCCGAAGTATAAAAGGCCT

>RXA02107-downstream  
 TAACCTGGTTGCTTGCGGGTGGC

>RXA02108-upstream

TTGATCCCGGTACTTTTGGCGCCCCAGATTTAGATGGGCGACCATCCTGATCACCCACAA  
TCATGCCGATCACGTTGATCCCGAGTTGCTCAAGCCCGGC

>RXA02108

ATGACGATTTACGCGCCTCGATCAGTAGCACATTCAATTCCAGTAGAATGCCACATCGTG  
GAACACGGCCGAAACTTTACCGTTGGGTCCCTATCCGTTGAGGTTCTTGGTTCTGAACAT  
GCGATGCTCACCCATTCCATGCCGATCGCGGAAAACGTTGGATACTTAATCAACGGCCGA  
GTGCTCCACCCCGCGATACCTTCCAACCCATTAAAGATGTCGAACTCGCCCTGGTTCCCT  
GTCAACGGCCCCCTGGGTGAAAATGCTGGATGTGGAAGGCTATTTGAAGAAATTTCCACCA  
AAGCGTTTCATCGGCATTACGATGGCATTGTTAATGATCGCGGTTTGGCGATCAACAAG  
AAGTTCTTAACGCATCTTGGTGAAACC'TATGGCTCGGAATACTCGCCGCTTGAAGAGGGA  
GAGTCGTTGGAAATT

>RXA02108-downstream

TAGATTCTTGGTTTAGATTCTTG

>RXA02109-upstream

GACTCTAAGGGAAGTGTTTCGCTTCAACCCGTACAGGTCTAATATGTCGGGAGTCTTGTT  
TTAAGCTCTTATATAACCTGTATAGGAAAGCGAAAACCTC

>RXA02109

ATGCTTGCACTGCTATTTCGGGGTGGTGGCCGGTGCCATCATGCCTTTCCAAACTTCGGTG  
AATAATAGATTGCGTCAGTCCGTGGGAGCACCCTGCTGGCGTCTTTTATTTCCTTTTTG  
GTAGGAACTTTTTCACTCCTGGTTGCAACGTGGATCACCAGTGGGCACCCGTATCCTGCT  
CTAGGAAATACAACCTGGCCAACCGTGGTGGATTTTACCCGGTGGCATGTTGGGTGTTGTG  
CTGCTGACGGGAAACATTTTGCTGTTTCCCCGAGTCGGCAGCGTGCAGACCGTTATTTTG  
CCCATCTCCGGACAGATCATCATGGGCC'TAATTATCGATACAAC'TGGCCTGGCACATTTCG  
CCTCAAGCACCGTTAACCCTGTTTCAAGATATTGGGTGCTGCTGCGGTACTTGT'TGGATCG  
CTGGCCGAGTGGGAGTGTTCTCTAAGAAAAACATCGGACAGACCCAATCCCAAGGTGCC  
TCCATTTGGTTGTGGCGCCTCTTCGGAGTGGTGATGGGCATGTGCCAAGCAACCCAGGTT  
GCAGTCAATGGTTACTTGGGAAC'TGTCCTAGGATCCCCCATTGAGTCAGCACTGGTGCT  
TTGCTGTTGGCACCAACCGCGCTGTTTATTCTGCTGTTGGTCACCCGAACCAAGTGGCGT  
GGAATCAACGGCGCTGGGAAGAAAAACCCATGGTGGATGTGGATCGGTGGCGTCATCGGC  
GCGACTGTTATTTTCACTACTGCTTACCTGGGACCGATCATTTGGCACTGGTGTTACCGTG  
GTGGTTATGTTGCTGGGCATGATGTTGGCCAGCCTGATGATCGACGCTTTTGAATCCTT  
GGCAGCCCCGCGCCGCACATTACATCGCGCAGCTTCTCGGGCTCGTGGTGATCATCCTC  
GGCGTAACAATGATCAGAATC

>RXA02109-downstream

TAAACCAAGAATCTAAACCAAGA

>RXA02114

TCCATCGGCTACGCCTGGACCACCGCATTTTACGCACTCACACCAGGCCTTGGCGGCATC  
GCCATTGGTATTTGGCTGCTCGGTGGTGTGCTCGGTGGGTGGTTATCCGCAAGCCGGGT  
GCCGCAATTTTCGTTGAAGTAGTGGCCGATGTGTCTCTGCAGCGCTTGCTTACAGTTT  
GGTATCTCCACCATTTACTCCGGCTTGGCGCAGGGAATCGGCGCTGAAATCATCTTCGCG  
CTGTTCCCTTACCGTCGCTACAGCCTGCCACCAACCATGCTTGCAGGTATGGGCGCAGGT  
GGCGGCGCAATTTTCCTGGAAATGTTCTTCTACGGAAACCTCGCAAAGACGATGTCCTTC  
AACATCATCTATTCCACCACTGTCCTTATTTCCGGTGCGATCCTTGCCGGCCTGCTCAGC  
TGGTACCTGGTCCGCGCGTGGCGAGGACTGGTGCAC'TTGATCGTTTTCGCCGCTGGCCCG  
GAGGTA

>RXA02114-downstream

TAAATGACCACCGCACTTGGAAAC

>RXA02117-upstream

TGAACACAAACTACCACGTTTATTGCATCATGCAACACCCTTGCTAGGATATAAAAATACT  
CTATGAGTCCAGACGTTTTTAAAGGGAGCGAATTACCATA

>RXA02117

GTGTCTACAGATCCAGAAGAGTTTCGACCAAGCTGAAACCCTCGATCAACTCGCGTATGAG  
ATCATCTGTCTACCCGGTATGGTGTCCAAAACACACCGACCAACAAGCGGAAGCCATC  
ATGGATCGCAGCGCCCTCATCTTGCTCACCCGCCCTTGACGCTCAAGGACCTATGACAGTT  
AATGAGCTAGCTGAAAGCTTTGGACTTAACGTTTCTACCGTGCACCGCCAACCTCAAAGCA  
GCCATTGCCAATGGCTTAATTGAAGTCGTCGATGATCAAGCATGCCCCGCTAAACTTCAT  
CGTCCAACTGAGTTGGGTAAAGAAAACTGCAGCAGGAGCTTCTTGCCCGCCAGCAGGAT  
CTACCCGCTATTCTTCATGATTGGGATGAGGAAGACATTAAAACGCATGCCAAGCTATTG  
CGGAAGCACAAATGAAAGCTTGAAGAATACCTCGATATGAAGTGGCCCCGCCCC

>RXA02117-downstream

TAAGTGCCCATAAACGCACCTCT

>RXA02121-upstream

CCGGGAAATCTTCAGGCGTCTCCTCCCATATGCTGCTGACAAATTCCAGAACAGGATCGT  
TGGGATACCTTCGAGACAAACTTCCGAAAGCTCCGCAACC

>RXA02121

ATGATCACCTCACCATTTTGTAGCGCGAGCTGAAGCTGCTCAACGAGGGGGAAGTGGGTATT  
GTCCAGCAGTTGGGTGGAATCAAGCAACATCGGATTTCATCGTCGATCTTGAATTAGATGGC  
GATTATGGGTGGGCGGTCTACAAACCGGAATTGGGGGAGCAACCCCTGTGGGATTTCCCT  
CCTGGCCTGTACAAACGTGAACGTGCAGCCTTTGTGATCAGTGAGTTTTTGGGTGGAAC  
ATCGTGCCTCCAACGGTGATCATGCACGATGCCCCGGCTGGTGTGGGCTCGGTGCAGTGG  
TTTATTGAAAACAATGGCGAACACTATTTTCCACTGTTTGACACCCGCGCTGACCTGCAT  
CCGCAGTTTGTCCGCATGGCTGTGTTTGATCTGTTGTGCAACAACACTGACCGGAAATCG  
GGCCATGTGTTGCTAGACGGCGATCATATTTGGGGCATCGATCACGGGTGTGTTTTTCC  
GTCGAACCGAAGCTGCGCACGGTGATTGGGATTTTCGAGGCTGCACCATTCAGATGAC  
TTGGTGACAGATGTTGAGCAGCTTTTGGAGGACGTCCCGGAAGAACTTCATCAGCTTCTT  
CATCCCGCAGAAATTGATGCGCTGCAGCGCCGTGCCTCAAGAATCAGCAGGTTACCGTTT  
CTTCCGCAGGCGAAATCGCATCGTCAATTCCCTTGGCCACTTGTT

>RXA02121-downstream

TGAGTAGGCTGGCGGGCAGGTGC

>RXA02123-upstream

GGATTGAGTCTTTTCGGCAGCTGCGTGTGAACCCGGCTTCATGACATGCAGCATACCTGT  
GCGAAAAATTCTTGACCGCCACTTAAAAAAGGTCTAGG

>RXA02123

GTGTGGGGTGTGAGTCTTCCACCAAATGTACAAACTGTGGTGAGCTGAAGGCCGCCGGC  
CACATCTACCGACCTTTGCGCGTAGAAATCCGCGACAACCTCCTAGCCAAACTTCGCAGC  
GGCGAAGATCCGTGGCCAGGCCTGCACGGCCTGAACTACACGGTCATCCGGCAGCTTGAA  
CGCGCGCTCATCGCCGGCCACGACATCGTGCTGCTCGGCGAACGCGGCCAGGGTAAAACC  
CGCCTGCTCCGCACGTTAATAACGCTTCTCGACGAGTGGTCCCCGATCATTTCCCGGGCGC  
GACGTTCCAGAACACCCCTCTTGCGCCAAACGTAGAGATCTCCGATGATCAGCCCATTGAA  
TGGGTACACCGCGATGCGCGCTATACCGAGAAACTTGCCACCCAGATACTTCCGTGGCT  
GATCTTATCGGTGATGTTGACCCAATGCGTGTTGCTGAAGGCCGCAGCCTCGGTGATCTA  
GAAACCATTCACCTACGGTCTGATTCTCGCGCCAACCGTGGCATCGTGGCGATCAACGAG  
CTTCTGACCTCGCTGAACGCATCCAGGTTGCCATGCTCAACGTCATGGAGGAACGTGAT  
GTGCAGATTCGTGGCTACAACATTCTGTTGGACTTGGATGTGCTGGTTGTTGCCTCAGCC  
AACCTTGAGGATTACACCAACCGTGGCCGAATTATCACTCCGCTCAAAGACCGCTTCGGT  
GCAGAAATCCGCACCCACTACCCACTTGAGTTGGACGATGAAGTGGCAATTATCCGCCAG  
GAAGCAGAGCTTGTGCGCAAGTCCCTGATATCTTGGTTGAAATCTTGCCCGCTACACC  
CGAGCGCTTCGTGAATCCTCATCGGTGAATCAGCGTTCTGGTGTGCTGCTCGTTTCTCC  
ATTGCAAGTGACAGAACTGTGGCCGACGAGCTCTTCGACGCGCAGCAGTGTTTCGGCGAA  
GATGAGGCCGTTGCCCGCCTGGTTGATTTGGAAGCAGCCGTGGAAGTCTCGGCGGCAAG  
ATTGAATTTGAATCCGGCGAAGAAGGACGCGAATGGGAAATCCTTGATTATCTCTCGCGC  
ACCGCAACCGCAGAAGCGCTGCGTTCCACTCTGCGCTCGCTGGATCTCACCCCGCTCATC

GCAGCATTAGACGGCAGCATCACCGTTTCCACTGGCACGAACATCACCGCGTCAGAATTT  
TTGGCTTCGCTCCCCGAACTCGGCGAAAGCACGCTATATGACGACATCGCTCAAGCTTTT  
GGTGCCACCACACCAAGTACTCGCGCGATGGCCATTGAGCTTGCTTTGGAAGGTCTTTAC  
CTTTCCCCGAAAAATTGCCAAGGATTCTGGCGAAGGTGAAACCATTACCGT

>RXA02123-downstream  
TAACTGGTTTTAAGGAGCACCAC

>RXA02124-upstream  
GCTTGCTTTGGAAGGTCTTTACCTTTCCCGAAAAATTGCCAAGGATTCTGGCGAAGGTGA  
AACCATTACGGTTAACTGGTTTTAAGGAGCACCACAGCC

>RXA02124  
ATGGCCACTTCACATTCACGACCCCGCCGAGCCGTTACGGACGCTACACCGGAGGCCCA  
GATCCGCTGGCACCCTCCAGTGGATCTCAGCGATGCCCTGCGCGATATTGCTGATGATGTC  
ATGGCTGGTTATTTCCCTGAGCAGGCACTACGTGAATACCTGCGCAGAGGCGCCCGAGGA  
CAGGAAGGCCCTCGATGATCTAGCCTGGCGTGACGCCGAACGCCGCCGAGAATTACTTAGC  
CGAAACAACCTCGGTGGCACACTCGCTGAGGTTTCGCAAGCTTCTCGATGAAGGCCTCAAG  
CTGGAACGCGCTCAACTGGCCCCGCGATATCGATATGGATGACACCGATCGAGCATTTCCGC  
GAAATGCAGATCAGCAACCTCCCTGAATCCACCGCCGCTGCCGTTTCCGAGCTAAATTCC  
TACGATTGGCAATCCCAAGAAGCACGCCAAAAGTTTGAACAAATCCGTGACCTGCTTGGC  
CGTGAAATGTTAGATCAGCAATTCTCCGGCATGAAACAAGCCATGGAAGGTGCCTCCGAC  
GAGGACAAAGCAGCCATCGCCGAAATGCTGCGCGATCTCAACGACCTGCTCTCCAAACAC  
CGCGAGGGAACGGACACTCCCACCGATTTCCGCAATTTTATGGCCAAACACGGCGAGCAC  
TTCCCCGAGCAGCCGCGCGACATCAATGAGCTCATCGATGCCCTCGCAGCCCGTTCCGCC  
GCAGCCAGTCGCATGTTCAACTCCATATCAGAGGAACAACGCCGCGAACTCATGAAACTA  
TCTGCCCAAGCTTTCGGATCCCCAGAGCTGCAGGAATTGCTCGGTGACCTGGCTGGAAAC  
CTCCAAGGTCTGCGCCCCGACCTCAACTGGGATGGCTCCGAACAATTCTCCGGCGACGAA  
GGCATGGGACTTGGTGATGGCACCGGCGCCATGCAGGACCTCGCCGAACTCGACAACCTT  
GCTGAACAACTGAGCAACTCCCACACCGACCTCGACATTGATGCGATTGCGCGCCAACTC  
GGCGATGACGCGCGTGTCTCTGCCGAAACTTTGGCCAAACTGGAGCGCGCGCTCCGCGAC  
AGCGGCCCTTCTTCGCCGCAACCCCGATGGCTCATTTGAAGCTCAGCCCCCAGGCCATGCGC  
CGTCTAGGGAAAGCGCTTCTCGACGCCCGCCAGCGAACAATTATCGTCCCGCCAGGCTCG  
CGAGACTCCCGGTTGGCAGGAGCAACCGGTGAAGCGACGGGAGCATCCCGACCTTATGTT  
TTCGGAGACACCCAACCATGGGATGTACCCCGCACCATCACCATGCTCTGCAGCGAACA  
GCCGGAACAGATACGGAAGGTCCGCTGCGCATCAACTTAGATGATGTGGAAGTCATTGAA  
ACTGAAGCCCGCACCCCTCAACGCCGTGGCACTGCTAGTAGACACCAGTTATTCCATGGCT  
GCCGAAGGCCGCTGGGTGCCCATGAAGCAAAACAGCGCTTGCCCTCCACCACCTGGTATCC  
ACCCGGTTTAGAGGAGATGAACTAGCACTAATCACTTTTGGTTCGACATGCCCCAAAACATG  
GACATCGAGGAACTGACTGCACTGCCACCGGTTACGAACAAGGAACTAATCTCCACCAC  
GCATTACTGCTGGCAGAACGGTTCTTTGCTCGCCATCCCTCCATGAAAGCAAGCCTGCTC  
ATTGTACAGATGGCGAACCACAGCTCACTTCAAGCCGATGGACACGCCTGGTTCAAC  
TGGCCCACTGACCCAGAAACCATGTTCAAGACCGTCAACCAACTAGATAAAGTAACCAAG  
CGAGGAACCCACACCACACTCTTCCGACTGGGACATGATCAAGGATTAGAGCACTTTCTC  
AACCAACTAGCCGACCGTGTGGCGGCACCGTGGTGGCTCCCGATCTGGACGGACTCGGC  
GCCGAGTCGTGGGCGAGTATTTACGACACCGCTAC

>RXA02124-downstream  
TGAGCATTTGGACGTTTTTCGCCTT

>RXA02125-upstream  
GACCTAAAATTTCATCACCTCACCGTTTTTAAGGCTTAGAAAAATAGCAGTGTTGGGATGT  
GAATATCCATTTATGCTGCTGTAGTCGGCTATGTGGACGC

>RXA02125  
ATGGTGGCAACCTCTCAGTTTATCGATGACAGCGAGGCTGCCCAGGCGGTACGCGCAGCT  
ATTGTTGCAGGATACCGAAACATTGATACTGCCCTAGCGTATGGAAACGAGCGCGGCGTT  
GGCGAAGGCATTGCGACCGCTGGAGTGCCCCGCGAGGAGCTCTTTATTTCACCAAGCTA  
GCTGCAGAAATCAAAGATTACGATGGAGCAGTCGCCGCGATTGATGAGTCTTTGGCGAAA

ATTGGCTTGGATTATGTCGATCTGATGCTCATTCACTCCCCACAACCATGGAGTGATTTC  
CGTGGTGGGGACTATTAGAGGGAAACCGTGAAGCGTGGCGCGCGCTGGAAGATGCCTAC  
AAAGCCGGAAAGATTTCGATCCATTGGTGTCTCGAACTTCCTGGAGGCCGATCTGGAGAAT  
ATCTTAGACTCCGCGACGGTTGCTCCTCACGTTAATCAGCTTCTTGTGCATGTTGGAAAC  
ACCCCAAGCGAGTTAATCAGTTTCTGCGATTCCAAGGGCATTCTGGTCGAAGCATATTCA  
CCCATCGCCACGGAGAGATGCTGAAGAACCAGCAGGTCAAGGCGATTGCTGACAAGTAC  
AACGTGAGCATTCCGCGAGCTATGCATTCGGTACACAATTCAACTGGGAACGGTGTCTTTG  
CCAAAGACTGCCAACCCAGATCATATGAGCTCCAATGCGCAGATCGACTTTGAAATTTCC  
GAGGAAGACATGGCGGCACTTCAAGAAGTGACCGCCGCGATTATGGCGAGCACAGCGGT  
TTTCTGTGTATTCCGGCAAG

>RXA02125-downstream  
TAGAAAGATTTTATCATGGGAC

>RXA02129-upstream  
TGTTCTGCCGATCCAGCACCAGCTCTGGTGGCAGGAGCTGAGAGTTTTGCCAATTAACCT  
GGCGAACAGACTTGTTGGAAATGAATTTGTCAAGAATGGC

>RXA02129  
ATGAAGATCATCTTCAAAATGGCTAGTAACAAGTTCATCGACAACAAAAAGGGCTGGCT  
ATGCTAGTTTTTGCCGAACCTGTGATGGAAATGCTTGATCAGCCTGAAGAACAACCTCAT  
AATGTGCGTGGAGTGGCTATTGAGAAGCGGGAGTTCTCAAAGCTCTCACCCTGATTTC  
ACCAGCAGACTTAAACAAGCTCAAACCGATAAGATTCTTGTGTTGGGATTTGCGA

>RXA02129-downstream  
TGACTATTATGTGGGCGACCCGT

>RXA02132-upstream  
GCAGCCCACCGCCAGCGATTCTCGCCGAACAAGGCTACGCATACCGCATCCTCGACGCC  
GACGACATCCTCTTCCCACTACCCAAGAAAGAGCTATAAC

>RXA02132  
GTGCACAACCTCTCCTTCGACGTGGACGAATCCTACGCCAAGAAGAACAACGAAATCCTC  
CGCGACGCAAAGCGACTCCAGATCTCAGCACTGTGCCTTGGACTCATCTCGGCGGCGGA  
GCCGTAGCCGTCTACCTGTTTTCTAACGGAGCAGTGTGGATGTGGATGATCGCCATCGTC  
ATGGTCTTCTCGCCCTGTTGAGCTTCATCATGATTCTTGTGATCCCCCGCCAAATGGGC  
AACGCACAAACGCTCTACGATGACTACGAAC TAGCCCCGCCATCATCGCAGAAGTAAAC  
CCCCGCGATGTGGTCTCTTGGCACTCGTCAACCGCAATGTGAACCCCGAAGCCAAACCA  
GAGTGGGCATTGGCCACCCGACGATCGTTTCGCGTGGGAGCACACGAACGTCGCCTCGGC  
GAACGTATCCCATCCGTCGCAATCACC GGCCGACGCACCGTCAAAGACCAAGACCACTGG  
GATGAAATCAGCCCCATGCCAATTACCTGGGGCACCACGGACAAAGACATCATCCGTGAA  
GCCGAGAAAATATCCCCACGAACCTCTGGGCCAAACTAGAAAAGAACC GCGGCAAGTTG  
GAGGACGTTAAAAAGACCCCCAACAACCTGTTCAAAC TA

>RXA02137-upstream  
GCCTACTACCGTCCACAGATGAGTAAACCCGGAAAAACCCGATTTAGTTATTGGTTTT  
ACCTGCGTGGGCTGAAAGTCTTCACTTTTAATCCTTACAG

>RXA02137  
ATGGTCGTTCTGATTTCCTTTCAACGATGAAGTGTGCACCCCTATTCCCGATTTGGGAGGT  
TTTCTTGTAGCCTATTGAGTGTGAACTTCCTTGGGATAAAAAATAAGAACAACGAAGGG  
GCTGACGCTGCAAGGCCAAGACGCCAGCTCCACCCCTGAGACCGCTACGCCTGACGCTACT  
GAGCAGAAAATTGCCAAAGGGGCACACGGCACCGAAGGGCCGTCCCCTCCGAAGCGTCGT  
GAAGTTGAGTTAGAGCGAGGTGTCGTTGGCGGCCAGTCTTTGGCGCCTACTGATACTTAT  
GCGCAGCAGCGCCAGAAGCGTAAAGAATTTAAAGCTTCTATGACCAAGGAAGAATTCAAG  
GCATACAAGCAGAAAGAGCGCGATGCCCGAGTTAAGCGTCAGCGCGAAACCCCAAGCTGCA  
ATGGATCGCGGCGAAGATGCTTATTTGATGGATCGCGATAAGGGCGAGGTTCCGCGTTTT  
GCGCGTGACTGGGTGGATTCCCGCAGGTTCTTGTCTAACTTTGTGATGCCAGTAGCTATT

GCTTTGCTGGTTGTCATGCTGATCGGTAACCTCAACCCATCATTGCTGCGACTTCTTCC  
ATGTTGCCATGGTTTTGATGTTGGGCTTCCTGATTGAGGGCATCACCCTGGTCGTCGT  
GTGAACAAGGCTGCTCGCACGAGGTTCCCTGGTACCACCGAGACTGGTTTTGGTCTGGGT  
TACTACGCGTATTTCCCGCACCATTCAGCCTCGTAAGTGGCGTACCCCTCGTGCACGCGTT  
GAAATTGGTGTGAAGTC

>RXA02137-downstream  
TAGCGCATGCGCACGTTAGTTCT

>RXA02138-upstream  
TCACTCGCCGAGATCCGTAAAAAGGGGAGTACACTGCAAGCCTATGATGTCCCGGCCTA  
AAAGTAATTCAAAGGGCCAACAGTTAAGGAGACTAAAGCG

>RXA02138  
ATGACCGCTCCATCAACCAACACCGGTGTTATCTTGACCGAGTCCGCAGCGTCCAAAGCT  
AAGGCACTCATCGATCAGGAAGGCCGCGACGACCTCTCTCTGCGTATCGCCGTTACGCCT  
GGCGGCTGCTCTGGCCTTCGTTACCAGCTTTACTTCGACGACCGCACCCCTTGATGGCGAT  
AAGGAAGACATCGTCGGTGGCGTTCGCCTTGTCGTTGACAAGATGAGCACCCCATACTTG  
CTCGGCGCTCAGATCGACTTCGCTGACACCATCGAGCAGCAGGGCTTCACCATCGACAAC  
CAAACGCAGGCAGCTCTTGCGCTTGTTGGTGACTCCTTCAAC

>RXA02138-downstream  
TAAAGAGATTCCGTTATGTAGGA

>RXA02141-upstream  
GCCCATTCGTTTCCGATCGCACCGCAACCCGCGACGGCGAAAACACTCAGAGCAACGCTT  
AAGAAGGAGTGGCGAAAAAATGAAGTCTTCAGCAAACTC

>RXA02141  
ATGTACGGCCCGACCGTATTCATGGCCGCAATGGCTGTCTACATCTTCGCAACAATG  
CACGTTAGTGATGGCGGCAGCGTTAAAGGTGTTGAGTGGGTTCGGTTCTGTGGCCCTGGTC  
CTGTACGAGGCTGTACGCTTATGCTCGGTGTCTACCTTCACTTCACTGAAGTCCGCGTA  
GATGTTCTTCCAGAGGACTGGGAAGAGGCTGAGGTTGCCGACAAGGCAGGAACCCCTCGGG  
TTCTTCAGCCCCAAGCTCCATTTGGCCGGCAGCTATGTCCGGTTCGGTTGGATTCTTGC  
TTCGGCGTTGTGTACTTCCACTACTGGATGATCGCAGTTGGTCTGATGCTCCTGATCTTC  
ACGATCACCAAGCTCAACCTTCAGTACGGCGTGCCAAAAGAAAAGCAC

>RXA02141-downstream  
TAGTACTAAAACCATATGCTC

>RXA02146-upstream  
GGTTCTCTCGCAGAGAGAGAAGGAGTGGGGATAGGGGCCTTCGCTCCGAACCCGACAGC  
TAACCTCGGTCAGCAAACAGGAAGAATTTGGAGTTTCATCA

>RXA02146  
GTGGGTAAGCACCGTCGCAACAATTCAAACGCAACTCGCAAGGCTGTAGCAGCATCTGCA  
GTTGCGCTTGGAGCAACCGCAGCTATCGCCTCCCCAGCACAGGCAGCTGAGGTTGTTGTT  
CCTGGCACCGGAATCAGCGTTGACATCGCTGGCATCGAGACCACTCCAGGTCTTAACAAC  
GTTCCAGGAATCGATCAGTGGATCCCTTCCCTTAGCAGCCAGGCAGCTCCTACTGCTTAC  
GCAGCCGTCATTGATGCACCTGCAGCACAGGCTGCACCTGCAGCAAGCACCGGTCAGGCA  
ATCGTTGATGCAGCGCGCACCAAGATTGGTTCCCCATACGGTTGGGGTGCTACCGGTCCT  
AACGCTTTTCGACTGCTCCGGCCTTACCTCATGGGCATACAGCCAGGTTGGCAAGTCCATC  
CCACGTACCTCCCAGGCTCAGGCTGCACAGGGCACCCCTGTTGCTTACTCTGACCTTCAG  
GCTGGCGACATCGTTGCGTTCTACTCCGGCGCTACCCACGTTGGTATCTACTCCGGCCAC  
GGCACCCTTATCCACGCACTGAACAGCAGCACCCCTCTGTCTGAGCACTCCTTGGATTAC  
ATGCCATTCCACTCTGCAGTTCGTTTC

>RXA02146-downstream



TAATCTGCATAAAGTCTTAAGCT

>RXA02151-upstream

ATGAGCGCATCGTCTTTTTTAGGAGTTGTCCGCCACCGTGAAAACCTGGAAACTTAAACCC  
AGCCCCACAGCAGGTGACGGCTCCCCAGAACAAGGCTCGT

>RXA02151

ATGGATTGGCCAGACATCGCCAAGGGAATATCCATCCTAGGTGTCGTGTTACTACACGTG  
TCGTTGGCAATTCCAGGTGGCCAGGACACCATGATGTCCCACCTGAACGCACTGCTTGAT  
CCACTTCGGATGCCATTATTTTTTATGGTGAGTGGAATTTTTTGCAGTTAAAGTTCTGAAT  
CAAAGCTTTGGTGAACCTTTCCGCGGGCGACTGTGGTTCTACCTGGTTCCATATTTGCTG  
TGGACTCCAGTGAATCTTTATCTACACCGCCTCGAGGGCACAGTTTTTACC GGTTAGAGCA  
CCGGGAACATGGGAATGGTACAGCGGCTCGATGCTCTCGGCCACCAATATGTACTGGTTC  
CTCTACTTCTTGGTCATCTTCAACCTATTTTTATGGGCAACGAGAAAACCTCCAGCTTGG  
GCAATTGTGGCGTTGGTGGCCTCACTGTGGCTACTTATGCCGGCTTATAGCGAGATTGAG  
ATTCTACGCAAGTCCATTATTTACTTGCCTACATTCCCTCATTTGGCGCTTACTTCCGCCCA  
CTGATTTTCGCGTTTTCGAGAAGCCGCAACAAGGCCAAAAGCAATAGTGTTTGCAGCGGTC  
CTTTATGTCTCGGGACTTGCTTTGGGCGTGATCTCAAATGGGCTGCGCGACAGCGAAAAC  
CATGGCGCAAGCGTGCTGTGGCTGATGAACCTCCGCGATACTTTTGCTCATGCACCTCGGC  
GGCAACCTCACTGGATTGATATGGATCACCTTCCTGGAATGATCATTCGGATTGTTTCC  
CTGCCTGCAGGAATTGTGTTGTGCGTATGGCTTGGCCGAATAAAGCCAGTAGGGGAGTTT  
TTGAAACTTATTGGTAGGCACACCCTTCCCATCTACATTGGGCATGCAACAGGACTATCG  
CTGATTTTTTGGTTTCGGCTTGCGCTGGAATTTTCATGGAGATTGATAACTTCTCTGACAGT  
TTGTGGCACCACACCAATACGTGGATGGTCATCGCGTTTGCTGCGCGATGCTCGGCGGG  
TACCTGACCTATCTGATCTCGCGAGTTCCAGTGCTGGGATGGACTCTTGTTCCCCCTAAA  
CTGCCAGAACCAGATAAAACTCCAGCTAAAGCACAAAGCTGATTCTCACGTTAAAGCTCAG  
TCTGCGAAGCCTATGAATGCTTCTACCTCTTCTAAGACGTACGGTATA

>RXA02151-downstream

TAACTGAAGCATAACCTGTGTGA

>RXA02152-upstream

AAGCCGTTAAAAGTTGAGACTCGCGCTGAGAATCTCACAGAAAACCTCCGAAGCTCCCCT  
AAGGTAGCTACCGGAATCAAATCTTAGGGAAGGAAAACAT

>RXA02152

ATGGCTATTTACCGTAAGCTTTCGGCTTCCGCTGCAGCACTGGCCCTGTCCGCATCACTG  
GTGCTTGTGGCGACTCTGAGGACACCACCGAAGAAACCTCAACCACCTCTTCTTCGACC  
ACTTCCAGCTCCTCCAGCAGCTCTAGCTCCAGCACCGCGGCTACTTCCGAGGAATCTTCC  
GCAGTTGAAGAGCCAGCAGTGGAAGCTCCTGTGGAAGAGGCTCCAGTCGAGGCACCTGTT  
GAGCAGGCACCTGTGCTGGAGCAAGCTCCAGTTGAGCAGGCTCCGGCACCGGTTTCAGGAA  
GCACCTGCACCACTCGAGCAGGCTCCAGTCCAGTTCAGGAAGCACCTGCAGCTGACGCG  
CCACCTGCACCTTCCAGGTGGTGGCGGGCGGACACGCTGGCTAC

>RXA02152-downstream

TAAAAATTCATGCTTTTACCCAC

>RXA02163-upstream

AGCCCGTACGATTTCTGCGTTCCCATCCTCTGCACCAGCTGCGCAGAAGATCTCCGAAGC  
CAACACCACGACGGGCCGATTACCCCATTTCTATTTCGCCT

>RXA02163

ATGGCGGTGGCAACATTCCGAACCATCACCGACATGTTGGAAACCAAGGGGATCGTGAGC  
AATGTAGGCGGCACCGACACCATCGATTTGGGCGCGTTGTTGAATGAAACCCAAGCCGGA  
ACCCGCTGGAGCGAACTTAGCCCCAACTATCAGTCCAACCGCGTCGTGCAGATTTCTACC  
ACCGATGTGCGCACCTCTAACTCGGCGGCCATGTACCTATCAATGATGTCTCTGGGTGAAA  
AATGGCGGAAAAACGGTGAGCAGCACTGCGGAAGCCGATGCCATCATCCCAGAGCTTAGC  
CAACTGTTTCGTGGGCCAGGGCTATACCGAAAGCACCTCCGCCGGCCCGTTTGATGAATAC

CTCTCCCAAGGAATGGGTTCCTAAACCAATGGTGATGATCTACGAAGCCCAGTTCCTCGCG  
GAACAAAACAAGGAAACTCACGGATTTCCGGCGATATGGAAGTAGTGATCCAAGCCCC  
ACCGTGACAGCACGCATACGGTGGTTAGCTTGAGTGACGTCGGCGCGGAGATCGGCGAA  
CTCCTAGAAACCGACGAAACCTGCAGCAGTTGGCAGTCAAACACGGTTTTAGGCCAAAG  
AACTCCGCAATGATCGCCGATGCTGGCATGACCGACCGCATGCCCAACAACCTCAATGTC  
ATTGATCCGCGGACTATGACTTCCTAGAACGACTCATTGATGGCGTGGGCGCATCGTAC  
AGTGCCACCCAGCAGAAGAGGACACAGATCTA

>RXA02163-downstream  
TGAAAAATCTTGTAAGGTACA

>RXA02164-upstream  
TCAATGTCATTGATCCGCGGACTATGACTTCCTAGAACGACTCATTGATGGCGTGGGCG  
CATCGTACAGTGCCACCCAGCAGAAGAGGACACAGATCT

>RXA02164  
ATGAAAAATCTTGTAAGGTACAGCGCTGGGCTTGAGCTTGGTGCTTCTGGCAGGTGT  
TCAACTGTTTCGGATTCTATCGATAGCCTCGGCGGGGCTGGGTGGTTCCTCTGAGACT  
TTGAAGATTGTGGCCGCCACAGAGCTGGAAGATCTGCAGCCCGCGATCGAGCAAGCCTCC  
GACGACTTGGGTTTTGATATTGAACTGAGCTTTCAGGCGGCACACTCAGCAACAGCCAA  
GCCCTCATGGATGGCGCTTTTGACCAGGACTATGATGCCACCTGGTTTGCCACCAACCGT  
TACGTCGATCTGATCGGCGCTTCCAACAAGCTGGGGGAGACCACCAAAATCGCGACCTCT  
CCCGTGGCGTTTCGGTGTGAAAACCTCCATGGCCCAGGAGCTCGGCTGGGATCAGCGCCAG  
CCAACCTGGGAAGAGCTGGGCCAGGCTCGCAGACCCAAGATTTCACCTTCGGTATGACC  
GATCCGGCCACTTCCAACCTCCGGATTTTCCGCGCTCGTTGCCATGGCCACGGCATATGCT  
GATACCGGCCAGGCCTTAACAACCAACGACATCCCCGCGATCGCCGAGCCGATGTCCACA  
TCCCTTTCCGGCCAAACCATCACCTCCGGTTTCCTCTGGCTGGCTCAAAGACACTTTCCTG  
GAACAGCCTGACCGCGCAATGCGATCATCAACTACGAGTCCGTCTGCACACCATGATC  
AGCGAAGACGGCGCCGATATCACCGTCTGTGGTGGCCCGCGATGGCGTGGTCAGCGCCGAT  
TACCCGCTCTCTACGATCACGGGCTCCGACCAGGGCGAGCATGTAGCAGAGCTGGCCGGC  
TGGTTTCGCTGAGCACCCCGACGCTTTAACAGATACTTATCGACGTCCGACCACCGCGAAC  
GCAACGCTCCCAGCGGAGCTTAGCTCGCAGACCATCATCGAAGCTCCCTTCCAGGGAGC  
AAGACGGTCACCGACGCGCTTATCGACGCTTACACCAATCAATTCCGCGTCCCAGGCGAA  
ACCACCTTTGTGCTCGACGTTTCCGGATCCATGCTGGGCCAGCGCATCACCTTGCTCAAA  
GACACCATGTCAGACCTGATCAGCGGCGGCGGACCACCTGACCTTGCCAACGTGTCCCTG  
CGCGACCGCGAAAAAGTATCGATCATTCCTTTTCAGCTTCGGGCCACACGAAGTAATCAGC  
GAAACCTTCGTGCGGTGGGCGAGCCCAAGCCGACCGATCTGCAGCAGCGCGTTGAAGCC  
TTGCAAGCAGACGGCGGAACCGGAATTTACGACGAGTGCTCGCCGCTACGCAGAGTCC  
GCTGGTGGCGACTACATCCCATCCATCGTGCTCATGACCGACGGCGAACTACCGCAGGA  
CGAACCTACGATCAATTCCTACCGAATGGAACGCGCTTCCTAGCAATATCCGATCAATT  
CCAGTGTGTCATCTTTACGGTGAAGCCAATGTTGCGGATATGGAACAATTGGCAGCA  
ACAACCGCGGTGAGACCTTTGACGCCATCAACGGTGACCTAGACGAAGCATTTAAGGAG  
ATTCGTGCCTACCAA

>RXA02164-downstream  
TAATGGAGGATCCTTCTTTTCT

>RXA02165-upstream  
GAAGCCAATGTTGCGGATATGGAACAATTGGCAGCAACAACCGGCGGTGAGACCTTTGAC  
GCCATCAACGGTGACCTAGACGAAGCATTTAAGGAGATT

>RXA02165  
GTGCCTACCAATAATGGAGGATCCTTCTTTTCTCCCGCAAGAATCTCGCGGGTATCGCT  
ATTGCAACGCTGATTATCGCGCTGCACTTAGTGATCGGACTCGGAGCATTTTGGCCTGTT  
GTCGCCATCGCCGATACGGCGCTGCGGTGGCACCTACACCTAAAAACCTCCGAAGAAG  
GAACTCCCTCCGGTTACGGCAACTCCCGAATTAGATAGCCCGGGTCTGCTTGCAGCCAGG  
TCTCAAGAACTCGTGAGAACTATGTATAGCCACGGTGCTGCAGCACCAGTGATCGAAGCG  
ATTAAGAGGCTAGACAGCTCACTGCAATTGGTTCATTGGTAACGGACAAGCCTGACCAAT  
TTCCCGAGCACCAAGTCACCATTCGCTCAATTATCAACCAGTACATCCCGCATTTATC

GACGCTTACCTGAAGATCCCCACCCGCAACGATCCTCGGGCAGTCGAAGACCTCATTGAA  
TCCTTCGACCTCCTGAACTCCGAGACGATGAAGATCTTCAATGCGATCCAAGAACAAGGC  
CTTAATAACCTTGAAGATCACGGTCGCGCACTGCGCATGCAATTTGGTCAACTGCCAGAA  
GAATTCCGGGAA

>RXA02165-downstream  
TAGCCACTCAATGCAGTTAAGTT

>RXA02166-upstream  
CGGTCGCGCACTGCGCATGCAATTTGGTCAACTGCCAGAAGAATTCCGGGAATAGCCACT  
CAATGCAGTTAAGTTTTCCTGCCCCGGTAGGATGGTCCGT

>RXA02166  
ATGAGTCTTGATCCACAGCTTCTTGAAGTCCTGGCCTGCCCCAAAGGACAAGGGCCCACTT  
CGATATCTGGAGAGCGAACAGCTCTTGGTCAACGAACGCCTCAACCTGGCCTATCGCATT  
GACGACGGAATTCCGGTGCTTCTCATCGACGAAGCCACCGAGTGGACCCCCAACAAC

>RXA02166-downstream  
TAGAAGTACATCAAGGACATTTT

>RXA02168-upstream  
AGGGTTTAGTCATCTATTTCCGGCTACGCTCACGTAACCTACGCATTCGTAAGTGGTCATG  
GGTCCAAGAAGCCCATCCAAGACTTAGGAGCTTTATTTT

>RXA02168  
GTGAGTATTTCTTCACTGACACCGCTGCACTCTTTCAAAGAGCCAGCAATTCTGTACGCC  
GGTCAGGCTTCTGCCTGGCAGAGGTGATCGCTGATTCCAGCGAAGACCACATCACCGCA  
ACGCACCTGCGCGAGCTCCTGTCTCGCTCCCGTGCAAAGACTGCACCTTTTCGCTCGCCAA  
ATCACCGCCATCGTGCTGGCTCACTTGCTCGTCTTGAGGAACTGACCCGCGAAGACGCA  
CAAATCGGTGCAGACATCGACGCACAGCCTGCCGTTTCCATTCAGGCATTCTGCTGGGA  
CAGATCGCTGCAACCCGTCAGCTGCGTGACCTCGGACTCGATGTCGCAGCAGCTTCCCGC  
CTTGGACACTCCCAGGGCATTCTTGGGCGTTGAAGCAGTAGACAATGAAGAAGACGTTTTTA  
GCTTTTCGCCATCCTGCTGGGCGCAGCAGCTTCCCAGTTTCGCTGGCAAGGGCGCACATATG  
CTCTCTGTTTCGCGGCCCTGTCCCGTGAGATCATCCAGGACACCATCGCTGGTGTTCGATGGG  
GTAGAGGTCTCCCTGCGCAACGCTCGTGACACTTTGTTGTCTCTGGTAAGCCAGAGGCA  
CTGAAGAAGGTGCTGCTGTCTACAGCGCGCAGCTGATGTTTACAACGAAGACATCAAC  
GAAAAGCGCAAGGGTGGATCCCTGGCAGAGCCTAAGTTTGACTACTTGGATGTGGCCATT  
CCTTTCCACCACTCCTCCATGCAGGACGCAGCCGACTTGGCTGTGAGTGGGCAACCACC  
TGTGGCCTAAACGTCAACGCGCGCGCTTGGCAGAAGCAATTCTAGTTAACCCAGCTGAC  
TGGGTTGAGCAGATCGCAAACCTCAAGGCTGATTACGTTCTTTCCCTCGATGCAGGCGTC  
AGCCGTTTACCGCTCCATTGCTAGACGGTCGCGGAATCTCTTTGGTTTCCTGCGTTCTCC  
GCTGCAGAGCGCGACAACCTTGGCTCGCCCTGGCTTCCACGTTCCCTACCGCTGAGGATTGG  
TCCGAGTTTCGCTCCAAAGCTGGTTAAGCTTCCAAACGGTGAGCACAAGGTTCTCACCGGG  
TTCTCCCGCCTGACTGGTTATTCCCAATCGTCTCGCTGGCATGACCCCAACCACCGTT  
GATCCTGAGATCGTTGCAGCTGCAGCGAACGCTGGACACTGGGCGGAAATGGCCGGTGGC  
GGACAGTACTCTGAAGAAGTCTTACCAAGAACAAGGAAAAGCTCGTTTCCCTGCTCAAG  
GTTGGACGCTCCGCACAGTTCAACTCCATGTTCTTCGACCGCTACATGTGGAACCTGCAG  
TTCGGTGACACAGCGCATCGTTTCCAAGGCACGTGCAACCGGTACCTCCATCAACGGTGTT  
GTTGTCTCCGCTGGTATCCCAGAGGTTGAGGAAGCAACTGAGCTGATCAACGATCTGAAC  
GCTGATGGCTTCCCATACGTTGCATTCAAGCCAGGCACCGTGGATCAGATCCGCGCAACC  
CTGAAGATTGCTGATGCAACCCAGAGACCAAGATCATCATCCAGATCGAGGACGGACAC  
GCTGGTGGCCACCCTCCTGGGTCAACTTGGACGATCTGCTCCTGACCACCTACGCAGAG  
CTGCGTTCCCGCAAGAAGCTTGTGCTCATGATCGGTGGCGGCATCGGAACCCCTGCAAAG  
GCTGCTTACTACCTGACCGGTGAATGGTCCACCGATTGGGGCTTCCAGCAATGCCAGTG  
GACGGCATCCTCGTGGGTACCGCTGGCATGGCAACCAAGGAAGCAACCACTTCTCCTCAG  
GTCAAGCAGGCACGTGGTCGACACCCAGGTGTTGATCCACACGACGCTGGCGGCTGGGTT  
GGCCGTGGCGATGCTCGTGGTGGCGTGACCTCTGGTCTGTACACCTGCACGCTGACATG  
TACGAGCTGGACAACGATTCTGCTGCAGCTTCCCGCCTGATCTCTTCCATCGATTCTGAT  
GATTACGCAGATCACCGCGAAGAGCTCATCGAGGCTATCAACAAGACCGCTAAGCCTTTC

TTCGGCGAGGTCTGAAGAGATGACTTACGCAGAGTGGATCCAGCGTTGGGTTGAGCTTGCT  
TACCCAACCTCAGGACCAACCTGGGATGATCGTTTCTCGATTGGTTACCCGCATTGAA  
GCTCGTCTCAACGAGGCAGAGCACGGCGCCATCACCACACTGTTCCAGACCATGCGTCT  
GTGGAAAATGAGGAAGAGGCCGTCGAAAAGCTTCTTGCTGCTTACCCGCAGGCCCGCGAG  
ATCCAGGTCTCTGCGCGCGACGCCGCGTGGTTTATTGGTCTGTGCCGCAAGCACCACAAG  
CCTATGCCTTGGGTTCCAGCAATCGATGCTGACCTAGCACGCTGGTGGGGCCTTGACACC  
CTGTGGCAGTCCCAGAACGAGCGCTACGGCGCGAACTCAGTCCGCGTTATCCCAGGACCA  
GTCTCCGTCGCCGGCATCGACCGTGTGACGAGCCAGTTGCAGAGCTGCTCGGCCGCTTC  
GAAGCTGCCTGCGTTGACGCTCTCGACGGCGAGCCAGAAGAGATCTTCGCTCGCCTCAAT  
GAGTCCAAGAACGAGCGCGAATTCCTGCTGGCTACCCACACATCGTGTGGCAGCGCAAC  
CTGATCGACAACCCAGCTCACGTCCCAACGAGGGTGCTTTCGAGCTCATCGAGGAGGAT  
GGCTACTGGGTCTATCCGTATCCTGGCTGATTCCCTACTTCGACGATCTGCCAGTTGAGCAG  
CGCCCATACCTGGTTTCAGCATGTTGACATCCCAGTTGAGCTGGGTGACGCTGGT

>RXA02168-downstream  
TGAACCGGTGGTTTCCCAATTGG

>RXA02169-upstream  
GTAAAGGTGCAAAAATCCACCCCTAGCCCTTTTAAATGAGTGTTGTTATTGTAAACCA  
CTGTTACTGGTGGGATTAATACTTATTTTGGGAGAACTT

>RXA02169  
TTGGACATGCAATAAACCGCCGAGGCTTCTTAAAGCCACCACAGGACTTGCCACTATC  
GGCGCTGCCAGCATGTTTATGCCAAAGGCCAACGCCCTTGGAGCAATCAAGGGCACCGTC  
ATCGACTACGCAGCAGGCGTCCCCAGCGCAGCATCCATTAAAAATGCAGGGCACCTTGGA  
GCTGTCCGTTACGTGTACAGCGACGCCCGGCACTGAATCCTGGATGATCGGCAAGCCA  
GTCACACTGGCAGAAACCCGAGCTTTTGAACAAAACGGCCTCAAAACCGCATCCGTCTAT  
CAATACGGAAGGCAGAGACCGCCGATTGGAAGAACGGCGCCGAGGAGCGGCAACCCAC  
GCTCCACAGGCAATTGCGCTTCACGTGGCAGCTGGTGGCCCTAAAAATCGCCCCATCTAC  
GTGGCGATCGACGACAACCCAAGCTGGTCTGAATACACCAATCAGATTGCCCCCTACCTC  
CAGGCATTCAATGTTGCGCTGTCCGCTGCCGGCTACCAGTTAGGTGTCTACGGCAACTAC  
AACGTCAATTAATTGGGCTATCGCCGACGGCCTTGGAGAATTCTTCTGGATGCACAACCTGG  
GGATCAGAAGGAAAGATCCACCCACGCACCACCATCCACCAGATCCGCATTGATAAGGAC  
ACCCTCGACGGAGTCGGCATCGACATGAACAATGTCTATGCAGACGACTGGGGTCAGTGG  
ACCCACAGGCAACGCGGTTGACGATGCCATCCCCACCATTCTTGAAACTCCAACACGGGA  
ACAGGTACTGGAATTGATGCTGACACCATCAACCAAGTAATCAAGATTCTTGGCACCCTA  
TCTAGC

>RXA02169-downstream  
TAAACTAGCCGTGCTGACTCACA

>RXA02170-upstream  
ATTTAAACCGCCCACTCTCCAGTCGGAGGATGGGCGGTTTTCGCATGCAGTACTATTAGT  
GGACGTGTCAAGAACTTCTAAGGTTACCCGGGATGGCGG

>RXA02170  
GTGTCTACTGTCTTTTAGCAGGAGTAGTTATTATTGGCGGAATTTTACTCTCCCTCAG  
AAGGAGGAAGTAAAGGTTTCCGAATTGCAGCCACAGGCCAGCGCTGCATCCATCCCGTCT  
TCATCTTCCACAGCTGGGAAAGCAGTGGAAGAAAGCCCTCTAACGCAGTTTGTGGAAAAC  
TCGACAGGCTCCCAAATTACGTACATGAGCCTGAAAGACGATTTCCATACTGGCACGTCT  
ACGGAACGTTTTCGCGGCCAGCGTTAAGTTTGTCTAAGCTCTACATCGCTGAATATGTG  
CTCGAGCACGGCACGAATAATGAGAAGTCTTTGGCGATGGAAATGATCAAAGATTCTCTC  
GACGTATCCGCCGAAATCTTGATGAGGCGTACCCAGAATCAATTGAGGAGATTGCGGAT  
CAATACGGATTGTCTTCCACAAGGGGAGACGCGCACTGGGGATACTCGGTGACATCCACT  
TACGATTTGGTGAAATTTGTGACGCTCTCATTATCGATGATCCAGATTACCGATCCTT  
GAAGCGATGCGTAATGCCAGCGCAGTCGCGGCTGACGGTTATCCGCAAGACTGGGGGACA  
GCGGTGCTTGATGAGGCAGAAGGATCCAAATGGGGATGGTCTGATGATCTCATGCTGCAC  
TCCTCTGTGACCTTTGGCGAAGACTATGTTGTGGCAGCTGCTGTGACTGGATCAAAAGAA  
GACCTACCCAATTGGTGGAACCAATTGGGTGAGGTTGTGAGTCAGCACGGC

>RXA02170-downstream  
TAGTTTAGCTAGATAGGGTGCCA

>RXA02172-upstream  
GAGAAACATATAAGTTGCTTTATTTTAAAGCCGGCATTGCTTAGAGAGTGGCCGATCACC  
GACTCCCCGCTCGAGGGATATGAAAGCGAGATAAGTTTCCA

>RXA02172  
GTGAATGCAGAACAAATCACCCAGGGGCGTCGCCAGCCGACGGCTCAAGAGTTTCGGGAC  
ATGCAGGCGAGCCAGAAATTTGGAGAGCTCCGCAGCAAGTTCCGTTTCCTTTGCTTTCCCA  
ATGACCGTTGCCTTCTTCTTGTGGTACGTCTACGTCTGTTGTCATCCTTTGCATCA  
GAGTGGATGGCAACCCAGTTTTCGGCGCAATCAACATTGGCCTAATCTTCGGCTTCCTT  
CAGTTTCGTAACCACATTCGTCTACTTACATCTATGTCATGTTTGCACAAGAAGTTG  
GAGCCTCGTCAGGCTGCTATTCGCCAGAAGATGGAAGGT

>RXA02172-downstream  
TAATCAGATATGAATTCCACTAT

>RXA02177-upstream  
AATACCCCCACTTTGAAAAACACCCCGTACAGTTACACCAGTACGGGGTGTTTTTTAGTT  
AAGCTTGGGTGATCACTTAACCCAGCTAGAAGGAGTCAAC

>RXA02177  
ATGCGGGAAATATTCCTGATCAGCGGTGATTCCACCGAATCATCCTTGGTTTTCAAGACC  
TCCGAAGAGGACGGCGCTGAGGAATTTTTCATTGCTGTAACAGATGAATCCACGCCATT  
CTTGCAAGGTCATAGCGAGATTAAGAGCGCCCCAGAACCCGAAGAACACAAAGAGGTCCCA  
CCTCCTGTCTAGAGCCGGTGCCTGCGGTAGAAGAGCCCGTGAGGAAAAAGAAATTGAC  
CCTCGTATCAGCGCTCCCCGTACGATGTACCCCGCGAAATTCAGATTCGGGTTTCGCTCA  
GGCGCCACCATCGAAGAATTAGCCGAAGAAATCGGCGTCACCGAAGCCCGCGTTGAGCCC  
TATGCCCACCCGTTTTGCTGGAACGTGCCCCGATTCGCCGACTTGGCTAAGCAATCACAC  
CCCATCAGGGAAAATGGTCTTGCAAACTGACTCTCTGGGAAATTCTTGCAACGGCGTTT  
GCCACTCGCGGCCACGATCTCACCACAGCAGCTGGGACGCCTACAAAGACGCCACCAAC  
CAGTGGATCGTGCGAGTTGATTGGAAGCAGGACTCAGCGACAACACGCGGAGTGGACG  
TTAAACCTGCACAACACCAGCAATCCACCCGCTGATCCGCGGACCCAGTCGCAGCCGAT  
TTGATCGATCCTGAATTCATTACGCCGCTACGTACCTTGACGTCCGTAAACTCCACCCAG  
GAAACCGTGTGGGAAGATGTCACCTCTTTCGACACCGTACCAAGCCCTGACGACGCACCA  
GACTCAGAATCCGATGCGGTTGCTGAAATCACCAACGACAACGAACCTGAAGTCGATGCG  
GAAGGCCACGCAACAGGCGTCGAAAAGCAGTAACCCACACTGGGAAGATGTTCTTTTA  
GGAGTTCGCGCAACACAAAGCGCCCCGAAGAAA

>RXA02177-downstream  
TAGGATGTGCTGATGCCAAGTCA

>RXA02178-upstream  
CCCACGCAACAGGCGTCGAAAAGCAGTAACCCACACTGGGAAGATGTTCTTTTAGGAGT  
TCGCGCAACACAAAGCGCCGAAGAAATAGGATGTGCTG

>RXA02178  
ATGCCAAGTCAATTGGGAGAAAACGCGGCGATCGTCACCCTCTGGTTTGTTAGCGCATCC  
GATCCCCAATCCATCATCCGCTCGGAACCTCGGGCGGATCGTGATATGGCCGAAAACCTG  
TTGGCACAGCTCAACCCACGTTGGCAATTACCCCATCGGGCAGTTCGCCCTCAACAGA  
TCCGTTCCCTGTAGTGCCAACGAGTTCTACATCGCTGGTTTTCCCGGCATCACCATCATT  
CAACACCGTGTGGGAAGATGTCACCTCTTATCCAAAGCTGAATCCTCGGTTACTGCGCAGC  
GTCCCGGCAACAGATGTCTACATTTTCGCCGTCATGAAGAAACCACCTTGGTGGCTTC  
GCACACATCTACAACGGTGAGATCAAACGATCCTTCATCGCCTATGAAGAGCGCGTCTTC  
GAAGACAACGGCATCCCCGGCGGCTTTGAAACCCCTACTGGGCAGGCAAAAAGGCACC  
CGGAAAACGCGCTGTCGTTGCCCTTCAACCCCATCGAAGTCCACGAAGCACAACTG

GCATGGCTCGGATTCGACGCCACCACCTCCCCTGACATCAACGTCGTTGCCTATGCCACC  
GATGGTCGCCCCGAGCCGCGCATCGCTGCACCCCGCATAATTAACAGCGAGGAAGTGACA  
AGGTCCGCCGTCGAAAAGCTAGGACTGCGCGAATCCGCCTTCTACGACGACTACGAAGAA  
TACGAGGCACCCGATCGAGTGGTGTCCAAGCGCATTACCTCAAACGCGAAAAAGCGGCC  
AGCTCAGCACAGAAATTTGGTAAATCTCTGTGGCGAGCCAGCCGCGAATTCGGGTCAAAC  
ATGGCGGAAAGACTCCGCCACACTGACCGC

>RXA02178-downstream  
TAGCGCTACTACTTAGCGCTGTT

>RXA02180-upstream  
GTTTCAGCTAAAAGAAGATCCTTGCTAGTGGAATCAGCTGAGTTTCCACGAGTTTTC  
AGCTTTCTCACAACTTGAATAGAAATTGAGGTATCCGGCA

>RXA02180  
ATGACGTCAGGGAAAATCAACGAGTACTAGGGGAGCCCTAGACCGGTATTTCAAATCTCG  
GAGCGAGGATCAAGCATTTGGCACGGAAATCCGTGCAGGTGTGGTCACATTCTTCGCGATG  
GCCTACATCATCATCCTCAACCCCTTGATCCTTGGCACCAACCCCTGACGTAGAGGGCAAC  
ACCCTAGGCATCGCACAGGTTGCAGCGGCAACAGCGCTTGCCGCTGGTGTATGACCATC  
GCGTTTGGTTTGATTGCGCGTTATCCATTTCGGCATTGCTGCTGGCCTGGGAATTAACACC  
ATGGTCGCGCGTGACACTGGTTTCAGGTGAGGGCCTGACCTGGCCGGAAGCAATGGGACTT  
GTGGTCCTTGACGGTGTTGTTGTTATTTTGGCTGTGTCCGGCTTCCGTGTTGCTGTG  
TTCCGTGCGATCCCGACATCCATGAAGGCGGCCATCAGCGTGGGTATCGGCCGTGTTTCATC  
GCCATGATCGGCCCTCGTGGATGCAGGCTTTGTTCCGCTATTCCAGATGCTGCCGGTACT  
ACTGTGCCAGTGACTTTGGGCATTGATGGTTCCATTGCGTCTTGGCCAACGTTTCGTGTTT  
GTTGTCCGGTGTCTTCTCTGTGGCATCCTTGTGTCCGTCGAGTTCGCGGTGGACTGTTT  
ATCGGCATTTTGGGAACCACCATTTTGGCGATCATCGCAGAAGCAATCTTTGATTCCGGT  
GCGTCCTTTGAAAATGGTGAAGCAAACGCAGAAGGCTGGTCACTCGCCGTTCCTGGTCTC  
CCAGACTCCTTCGGTGGCATCCCGGATCTTTCCATCGTCGGCGCAGTTGATTGATCGGT  
GCGTTTCAGCCGCATCGGTGTGGTCCGCCGACCTTGCTGATCTTTACCCTGGTCCTTGCA  
AACTTCTTCGACGCCATGGGCACCATGACCGCTCTTGGTAAGCAGGGCAACTTGGTTGAT  
GATGAAGGCAACCTTCCAGACATTAAGAAGGCACTGGTTGTGGAAGGCGCAGGTGCCATT  
GTCGGTGGTGTCTTCTCTGCATCCTCCAACACCGTGTTCGCTGACTCTTCTGCAGGTGTT  
GCAGACGGCGCACGAACCGGCCCTTGCCAACGTGGTCACCGGCTCCTTGTCTTGGCTGCC  
ATGTTCTTGACCCCACTGTATGAAATCGTCCCATCGAAGCAGCAGCACCAGTGCTTGTA  
GTTGTTGGCGCGATGATGATGGGGCAGGTTACCGAGATTGATTTCTCCAAGTTCTACATC  
GCATTCCAGCGTTCCTTGACCATTTGTGATCATGCCTTTCACCTACTCCATTGCAAACGGC  
ATTGGCGTTGGATTTCATCATGTACGCCATCATGGCTGCAGCGGCAGGCAAAGCAAAGCAA  
GTGCACTGGCTGATGTGGCTGGTTCGCTGGACTCTTCGTCGTGTTCTTCGCGATTGATCCC  
ATCATGGAAGCTGTCCGC

>RXA02180-downstream  
TAATGACAACGCGCACGGTAATT

>RXA02181-upstream  
TTTGGCTAGTAGGGTGATAATCTCAAATAAAATGCACTTTACCAGCTTTTTTCGATTCCG  
GAAGGTCTAACTACAGTCGTGGTGACCACAAGTTTCTC

>RXA02181  
ATGGTTGACGGACACATCCGCAATCTTCAGGGCCACATCGATCGCCTCGAGGCGGCAGCC  
CCTACTGCTTCACAGTTCCATGATCGCATCATCACTCAATTGCGTGAAGCTCCGGGCAGT  
GTTACAGGCAGTGTACGATTGAAAATAACCACTATAACGTCGAGCTGCGCCCCCCCCGC  
AAGTTAAATTCAC'TGGTCAACCTTGATACCCACGGCCACCGCGATGAGCGCCTACATCCA  
AAGATTAAAGGCCACGATATCGCGTGGCAGAACACGGCCACCGCAAACAGCCGCCGCCAG  
GGCGCCGATGATGGATTGCTTGTGACGAGTCCGGCCAGGTGATCATGGCTATCAATGCC  
TCTCTCTTGGGAATTAAGGGCGACACCGTGTTCATTCCACGCACCCAGGTGCGCTGCCG  
TCTGTCTTGGGAATCAACGGTCAATTGCCTACCTGCAGGAACAAGGCTGTAATGCAAAGCCT  
CGAGAGCAAGGCTTCAACATCAATGATTTGCGCTCTTCGGAAGTGTGGCTGGTGGATTCT  
TTGTCCGGCATCCGTGCGCTCGCTGCATGGCTCGAATACGGTTCCAAATTCCCAGTCTCA

GAAACGCGACCTGTGGCAGCTTTCGTGCCGACGTTTCTGAAGTCAATGACTACCTATGG  
AGCACTGCACAGCAAGTG

>RXA02181-downstream  
TAGGTCGCTCGACTGTTATTCTC

>RXA02183-upstream  
TTGCACATATTCCGGATTCCGATCGTTTTTATATCACTGGTAAGCGTTGGCCTGACCTCT  
ATGAGGTTAGATTTCGTCCCTGCTGACTAGAATCAAGACTC

>RXA02183  
ATGGCAAGCCGGAAGACCAAGCGTAAAAACCTCATTTCAGATTCTCAGCCTTATCGTTGCT  
GTGTTATTGGTGGTGATTTTGTCTGTGGTGTTCAGCAATGGTGGAAACAATCGCCAGAG  
CCACTCCCCCAAGAGATCTCTATCTCAGCATCTTCTCCCGCTGGTGAAATCGAGGTATTC  
CCATTTCAGCATGTGTGAACAGGTGTTGAATGCGAAGAGAACGAGGTGCCAACGCTGGAA  
GTGGTGTGATGAAGAGTTGCACCTGACGATTCCAGAGGCAATTCATGATCATGACTGG  
TACTTGTGTTGACATTTATGATGATCCGGCTGCAAAATGACGAGTTCTACCACACCAGTTAC  
GACGCCACCGAGGCAACCGTTTCTGGTTCTGTGGATCCAACCGAAGAGGGTGCGGAGCGC  
CCACGTCTGGTCGTAGTGGAAGTGTCCGCTGTGATGATCGGTGAGGATGAAAATGGTGAG  
GAAAGCCCTTACACCGTCACGTGGTCGCTATCCACGATGAACGAG

>RXA02183-downstream  
TAACTCACTCACAAACAATAAGG

>RXA02185-upstream  
CAACTCCTTGGGGTGAAGCCAGACATCCACTGGCAGAGCAACTCCTCCGCTCTAACCCGA  
CAGCTAACCTCGACGGCGACAAATGAGAGGAAAACTTTTC

>RXA02185  
ATGGGACGTCCTCCACTAAGACTAGCTCCGCGTTCACCAAGCTCGCAGCTTCCACCATC  
GCTTTCGGTGTGCTGCAACCATCATGGCTCCTTCTGCATCTGCTGCACCTGATTCCGAC  
TGGGATCGCCTCGCACAGTGCAGTCCGGTGGTAACTGGGCAATCAACACCGGTAACGGC  
TACCACGGTGGTCTGCAGTTCTCCGCTAGCACCTGGGCTGCTTACGGCGGCCAGGAGTTC  
GCTACCTACGCATACCAGGCAACCCGTGAGCAGCAGATCGCTGTTGAGAGCGCACCTTG  
GCTGGTTCAGGGCTGGGGCGCATGGCCTGCTTGCTCCGCTTCCCTTGGACTGAACTCCGCT  
CCAAACCCAGCGTGACCTCTCCGCTACCACTCCACCCAGAGCCAGCTGCAGCTGCACCA  
GCTGTTGCTGAGTACAACGCTCCTGCAGCCAACATCGCAGTTGGCTCCACCGACTTGAAC  
ACCATCAAGTCCACCTACGGCGCTGTACCCGGCACCTTCGCTCAGTACGGCATCACCGTT  
CCAGCTGAGGTTGAGTCTTACTACAACGCTTTCGTCGGC

>RXA02185-downstream  
TAAATCTAGCTGCACTTTTAA

>RXA02186-upstream  
AGCTGATCATCACTTTGAGTATCCAACCACCCCTTGAGGGTGGGGATGGGGGAGTCTTTT  
TTCATGATGTTGTTAAGTTTAAGCCTTGTTGAGGTGACTT

>RXA02186  
TTGTTCCCAGAGTTTGAAAGAATGTATGACATGGCAAACGTAGAGAAGAAGCACTTCGTC  
GATCCGGCATGGCCGGAGCACAATCCAGCTGACGGACACGTCGTTACTGAACTCATCTCC  
AAGGTCGCAGGCGCGTCCAGCCATGGGGCGATGACAAGGAATTCCCAGTTTCTGCAGAA  
GAGACCGGATACGTTACCCGTACACCCGGATCAACCGC

>RXA02186-downstream  
TAAGAACTTAAAAAGAGGCAA

>RXA02187-upstream

GGATCGACGAAGTGCTTCTTCTACGTTTGCCATGTCATACATTCTTTCAAACCTCTGGG  
AACAAAAGTCACTCAACAAGGCTTAACTTAACAACATC

>RXA02187

ATGAAAAAGACTCCCCCATCCCCACCCTCAAGGGGTGGTTGGATACTCAAAGTGATGAT  
CAGCTCTCCACAATCCTTAGAAATCGACCCGATACGGTTCTCCCTTTACCACCTAATTTG  
GCCTCTCTTGCTGCGCGTTTACAGCTGAGGGCGTCTGCGATTGCGCGGGTGTGAAACTC  
AATGCGTTGGAACCTGGTGTGTGGAGGCCGTGGCCAACCTGGTGGTGAACCTCACCCG  
GTTACTGCCCCGAAGTGTTGGAATATTTGCATGTGGCGTTGGCAGAGGATCTTCCAGCG  
CAAGACACGATTGGTGGCGCTCTTGCCACGCTGAAAAATTTGCGGTGGTTTATGGCGAT  
GACCAGTTGATGATTGCTCAGGAGACGATGGCTGCGTTGCTGTTTTCATTGGCGGTGCTT  
CCGGAGGTAAGTGATCGCGGGCAGAGTGAGGAACAGGTGAGGAAAGCGTCGATAAGCTT  
TCTGATAGGCACCGCAAACCTTTTGCACACGCTTGGCGGCTCGGGTGGCTTCGGTCTGACG  
CGCGATGCGGCGCCTGATGCGGATCCGTCGCGGCCGATTCCCGCAGTTGCTGGCGTCGGGG  
TTGTTGGCGCGCTGGATGAGCAGACCGTGGCGCTGCCGGCGATGGTGGCGCGTGTGATT  
GAGGGCCGCGAGCAGCTGCCCGCTCAGGTGCGCCCAATTCCGCGCACGGCGCGCCAGGT  
TCGAATGATGGCGGCATTGCAGCCGGCCTTGAGGTGGTGGCGCACATGCGATTGCTTATC  
GACGCCCTCAGCCACGTTCCCGCCCCACGCTGAAAGTCGGAGCCCTCGGTGTGCGCGTG  
GTGACTCGCCTGAGCAAGGAATTAGACCTTGATGAGACCGAGCTGGCACGTCTACTGAGT  
TTGGGTATGGCCAGCGGTCTAATCCGTAAAGGCGTGCCCGATCCATTGCCCATGGATGAT  
GATGGCGCGGATTACGTCGCTCCCACCCGCTGGCTGACGAATGGATGGAATATGATCTG  
GCGCACCAATTGGGCACGTTGATGTCTGGTTGGTGGAAAGCAAACCTACGCGCCGTGGTTG  
GTGGGTGGGCTGATGATAAGGACAAGCCGATCCATGTTCTCAGTAAACAAGCATCATT  
GATTGCTTCTCTGATGCTCGTGCAAGATCCTGTCTCTTTATCTAGGGTTTTAGTGGAC  
AATCTGCACGCGGATTTAGCATTCATTATCCCTTGCGGCGAGTCGGATGAATCCTGAC  
ACCATCACACAGCTGGTACAGGAAGCCAGTGGATCGGAGCATATTCTCAAGGCGTGACC  
GCAGCGGGTCAGGCCCTAATTGATGGCGAAAACCTACGGAGGTAATCAAGGCTCCTGCG  
CCGGTGGAGAATTTTCATCGTGCAAGGCGATTTTACCATCATGGTTCCAGGACCACTAACC  
CCTGCGATGCAAAAAACCATGGATTGATCGCATCGTTGGAATCACCTGGTTTGGCCTCG  
GTGTATCGACTCAGCGAGAAATCCATCAGGCATGCTCTGGATCTTGGGCTCACCACCCCG  
GAAATCTTGAGTTTCTCAAAGAACATTCATGACAGATCTGCCCAATCTGTGGGCTAT  
TTGCTCAGCGATATCGCCAGAAAGCACGGCACCCCTCCGAGGCGGCCCTGCACTGTCCTAT  
ATCCGTAGCAGCATCCCGCTTTGCTGCTTCCGAGTGAGGCGGGCGCCGATGTGGCG  
CTTCGGCAGATCGCTCCACCGTTGCGATTGCTCAAGCACCCCTGCTTCAGGTGATCACT  
GTGCTGCGTGCTGCCGGGTTCACACCTGTGGCAGAAAGACGGCGAAGGCGCAAGTCTGAAT  
ATCTCGCCATCCCCTGCACGTGTGCCCGCAGCTTCCCCACCACCAGTTGTTCCGGCACTG  
GATGAAAGCCGGGTACAGGCAGCAGTCAAAGCAATCCGACGGGAAAATTCAGCATCTCAA  
GGAATGTTTCCACACAGCCAACCTTTTCGGTGCTGCAGGTGCAGTGCGAGGGCAGCGC  
ACGGTGACGTTGGGGTTCGTCGATAAGCAAGGCGTGGCCGTGCACCGCGTCGTCAAGCCT  
TTAACCGTCAACGCCGGGCAGGTGGACGCTGTGGATGAAGCCACAGGTGCGGTGCATCGT  
TTCATGTTGCACAGGATCACAGAAGTAATAGTGGATAAC

>RXA02187-downstream

TAGCCTAGAAGTGACATAATGGA

>RXA02199-upstream

ACAGCTTAGTACGGATTAGACAATTCCCGAACTTTTCATTTCGTAGTTTCAATTTCAACGCC  
GCCTAAGCAACACAGGCAAAGCGCCACTAGTCTCGGTCGC

>RXA02199

ATGACTGACTCCACTCCGCAAGGCTCAACACCAGGCATGTCCCCTGAAGCTATCCTCAAC  
GGCACCGGAAAGCCGTGGGAAGAGTGGCTAAAAATTGCTTGACGACGTAAAAGCCACCTCT  
TGGACTCACACCCACATCGCAAAGCACATCGTGGACAACCTTTGATGTGAGTGGCTGGTGG  
GCTCAAGGCATCGCGATTGGTTATGAATACGAACGTGGCATGCGCAAACCCGGGATGACC  
AGCGATGGGTTGCGGGCAATGCCTCCAAAACCTTAACCTGCCGGTCGAAAAAGTGTGG  
AAGCTCTTCGGAGACGATGACCTGCGGGCGCAGTGGCTCGATCCCGCACTAATTGAGAAA  
ACCTCCGCCCTCCGAACCTAGAACATTCAATGCCAAATGGTTGGCCGATGATTCTCGAGTG  
AGCGTCAACTTCACCTCCAAAGGCGACAATAAATCCAGCTTCGGCATCCAGCACAGACGC  
CTGCCGTGATCAAGACAGCATCCCTGTGATGAAAGCATCTTGGAAGAAGCATCGCTGCA  
TTAGTTGAGGTGTCAAACAATTTTCGCTT



>RXA02199-downstream  
TAACATTAAGTTCTTAGCCTTCA

>RXA02203-upstream  
CGATTCAAAAGAGTTCACCGAGGTAGGAAACATCGTGGTCGCAGCCATTGATGCCCTCCT  
GGGCGTGCAGCTCTAGGAAATTTAGGAACAATACATCTC

>RXA02203  
ATGACCATTCCGCGCCACTTTCCAGCCTTCCGTAGATGAATTCATCTCCACTCTCGAAGAG  
TTTGCAACAGGTTTCATACCTTAAAGAGGACGAAAAGGAATTCTGGGACGAACCTTTTCGAT  
GTCAAGGCACTTCCAGATCTTTCGTTTCATCTTGGAAAACTACCTTGATTCCCTAGATAAG  
CTCGGTGAAGCACCAGACCTTGATGCTGTTAACGCCTCCGCTCAGTCCACCCCTTGATGAG  
CTGGAGAAGTTCAACACAAAGCACCACGGTGTGTTGTTGAGCCTGAAGAAAAAGAAGAG  
ATCACTAAATTGATGTTTGATGCTGCAAAGCAGACTGGTGCAGATGATCTTCTGCAGAG  
GCTTTCCCTGAGTTTGAG

>RXA02203-downstream  
TAAATTTTCAGTAGAAGTTTTTTA

>RXA02206-upstream  
GGCAGGATCTGCTGCTGCGGCTAGGAGGGTTATCTCTTCATTACCCGATCTACCGTACT  
ACCTTATGACCTCAGTAGTGTGGTGGGCGTGAAACAGCGA

>RXA02206  
ATGGTTCGGTTCAAGTGGTTTGCGGGTATCCAGGCTCGGTTTGGGCACCTCAACATGGGGC  
TCGGGCACCGAGCTGGCTGAGGCAGGCGATATCTTTAAGGCGTTCATCAATTCTGGTGGC  
ACGCTTATCGACGTCTCCCCCAACTACACCACCGGCTCGCGGAAGAAATGCTCGGCACG  
ATGTTGGATGCGGAAGTCTCTCGTTTCGGCTGTCTGTCATTTCTCCAGCGCAGGTGTCAAC  
CCCGCTCTGCCGCTCGGCCGACGTGTGGATTGCTCCCGCCGCAATTTGATTGCCCAATTA  
GATGTCAACCTGCGGGCATTAACACTGACTATTTGGATTGTGGTCTGTGGGCTATTGG  
GATGAGGGCACCCACCGCATGAGGTGGCCGATACTTTGGATTACGCCGTGCGCACCGGC  
CGAGTCCGATATGCCGGTGTCCGAGGATATTCCGGTTGGCAGTTAGCGGTCACCCACGCT  
GCATCCAATCATGCAGCGGCCCTCCGCCGCCCGTGGTCTGTCACAAAATGAATACAGC  
CTGCTGGAACGCCGCGCAGAACAAAGAACTCCCTGCCACCCAAACACCTAGGTGTGCGA  
TTCTTTGCTGGCGCTCCGCTGGGGCAAGGCGTGCTGACTGCTAAATACCGCTCCGAAATT  
CCCCATGATTCCAGAGCTGCATCCACAGGACGCGACGCAGAAGTCCAAAGCTACCTAGAT  
AATCGAGGCCGCATCATTTGTCGATGCTCTTGATACTGCAGCCAAAGGATTAGGCATTAGC  
CCCGCTGTACAGCCACCACCTGGGTGCGTGATCGTCCCGGAGTGACAGCTGTCATCGTG  
GGCGCTCGCACACATGAACAGCTGTACATCTTCTCAAGGCGGAATCGGTGACTTTGCCA  
ACACCAATCACACAAGCCCTTGATGATGTCTCCCTG

>RXA02206-downstream  
TGACTTGGTCCAATTACATTAC

>RXA02207-upstream  
GAATCGGTGACTTTGCCAACACCAATCACACAAGCCCTTGATGATGTCTCCCTGTGACTT  
GGTCCAATTACATTCACTGGTAATCTGAAACCTTGTGAAT

>RXA02207  
ATGCGCCGTCGATCCCGTGTGTCCCGTTTGGCTTCCCGCCACAGCTTTGCTGGCCTCAACT  
GCACTTCTTTTAAAGTGCATGTACGCAAGGGGTAAACGACTCCCCGGATATGGGCAAGGCA  
ACTCCCGCTGTCTCCCCCGCAGCAAGCAACCCGGATGGCCAAGTAATTGAGTTCGGCAAC  
ATCACTGACATGGAAGTCACTGATGGTGACATCCTCGGTGTACGCACCGAAGACGCACTC  
GCTATTGGTACAGTCTCCGACTTCAAGCGGGTAGCCAGGTGGAACCTGGACGTCGATAAG  
CAATGCGGCGACCTGACCGCAACCGGCGGCACTTTCGTGCTCCCTGCGCCGATGGCGTT  
TATTTGATTGATGCCAAGGACCGGATCTGGATGAGTTGCGTGCAACTGACAAGCCAGTC  
ACGGTGGCAGCCTTGACCAGCGATGATCAGCTTCTGGTGGGCAATGGTGAAGATGAAGAA

CTCACCATCTACCGCGAGGGCGAAGAGCCAGAAACCTTCACCGTCGCGGGTCCCAATACC  
CAGCTCATCGCCGTTCCGTGTCATTGATCGCCACGACGCCGTTGTGCGCACCTGGAACGAA  
AACACCACGATTCAAGATGTGGACTACCCCAACGACCGTGAAGGCGCGACCCTTCGCGTG  
GGACTCGGCGTTGGTCAAATGGCTGGTGGCGAAGACGGCCTGCTGGTGTCTCTGATGAA  
ATGGGTGGCCAAATTGCCATCTACAACGCTGATGATGTC

>RXA02211-upstream

ACTGTCCGAAGTATTGGATCTGGTTCGAGGGAAGTGTCCGTAAACGCGACTAAACGACCCC  
TGATTCACACTTTCAGACTACAAGAAGTACTAGACTAAGCGGT

>RXA02211

ATGGTTTCAGTCTCTTTAATTCAGCCCCGTCAGGGAGAAGCAGTCGCCGCAGCTGAGCGA  
CGTGACTTTTTCAGGCCACCGGTCTTAAGCCTCAAGAACTGACCTCCCGAATGTTGGAT  
ACCACCACCTTCTCGAATTGGCAGTCTGGAAGGTTTCGACGGCGTGATTGTGGGCGGAAGC  
CCACTGAATGCCACCAACTTTGAGTACAGCGATTGGCAACGCCACGTCCACCGCGAATTG  
TCCTTGCTGATCAATCACCACCTGCCAACAATCTTTGTCTGCTACGGCAATACCTTTTTG  
ACCTTCTTCTCTGGCGGACAGATTGGTTCGCACACACCCCGAAGATTCCGGCGCCACCACA  
GTGTTGCTAACTGACGCCGGCAAACGAGACGTACTCACTCAAGACCTACCGGATAGCTTT  
ACGTCCTTTACTGGTCACACGGAAACTCCGTA

>RXA02212-upstream

GTGATGTGACTTTCTATACCCCCCTTACTACCCCCATTGCTTATTGAGTAAAGTCGGTT  
CCCCGCTCTTTCGTGAGCCCGACACTAATGAAGGTTTTTAG

>RXA02212

ATGATTCCAGAAAATATTGATCTCAAGCAGCTCGCTTCGGAGCTTGGTGATGATGCCGTG  
GCAATGGGGGAGCACACAGGCAACCAGTTTCCGACTTTGGAAAAAGACCTTATTAATGTT  
GTGACAGATGCAAAGGAATCAGATTTTGGATCTTTAGGGGTCGTGATTCTTGATGAAACT  
CCAGTGATGACTTCCAACCTGAGGGATATTGCGCAGGAGCTGTTGATTCAAACGGATCTG  
GACACCGTTGTGGTGCGGGCTCCAATGTGCGCTGCGGTGGTGAGTGATGTTTCAATTCGAGG  
GCGGCGCTTGAGTCAGGGCAGCATGATTTGCTTGGGACCACTGATTACGTGCTGGGAACG  
GAGCTTTTGGTACAGGATGTAACGGAATCGACGGTGGGGAATATTGATTGGGGTCAATTG  
CTGATTTGGGGGTTGGTTGCTTTGGCAATCGCCGTGGTTGTTGCGGGTGCGTCTGTGCGT  
CGAAAAGCAATATCTTTA

>RXA02212-downstream

TAAGTAAAGTTCTAAAGCTTTAC

>RXA02216

GTAGCGCCCGCCCTGGACACGTGGTGTGGCAACGGGACCAACCTGCCCCATCCAGATG  
CTGCGCGCCAACAAGAACACCTGGTCAGTTCAATTCCATGCGGATATGGATGCCGTAGGC  
ATGAAAAACCGCATGGATTTTTACTCCAACCTACCGGTTCTTCTCCCCAGAAGATTATGAC  
CGCATCATTTGCAGAGCTACCTCTGTGACTCCATTTATGCCAACAGGGTGCTCCGCAAC  
TTCGTGGAGGTCTGCGAAGGAATTCGTGTTGCTGATGGTGCTGAGCACCAACTCCCAAAG  
CTTAAC

>RXA02216-downstream

TAATCGAGGAGACTGGTGATTCCG

>RXA02217-upstream

CCAAATGGGTATGGGCGCTTTTGACCATCGTCAATGGTGTGGCCCCGCTGCCTACTGGG  
CTTTCGGCAGGAAAACTAAGAGTTGTTAGGGTGGCGCTC

>RXA02217

ATGACTAATAAAACACGAGCTCTACTCATTGGTGGCCACGGCAAGGTGGCCCTCCTAGCA  
ACCCCCATGCTTATCGACGCCTCGGTGCAGGTCACTTCCATGTACCGCAATCCGGACCAC  
AGGTCCGAAATTGAGGCGCTGGGCGCCACAACTTTAGAGCGTGACGTCACCACACTCAGC  
GTGGAGGATTGGGCAGATCTGCTCAAGGACTTCGACGTAGTGGTGTGGAGCGCCGGAAC

GGTGGCAAGAACGGCGCGGATGCAACTTATGCCATTGATCGTGATGCCGCGATCGCATCC  
ATTGATGGTGCAGCTAGCCTAGGGGAGAAGGCACCTCGCTACATCATGGTGAGCTACATT  
GGATCCTCCACGCACACCATTTGATCCTTCAGCATCCTTCTACCCATATGCAGAATCCAAA  
AAGGCCGCTGATGAGCACCTAAGCTCCACCAACCTGGATTACCTTATCCTCGCACCAGCA  
GCCTTAACTCTGGATGAAGTCAATGGCGTTGAGGTGATCGCCGATACCAACGAAGCAGCC  
GCAGGCCGCACCACATCAAGAGTCCCTCGTTGCGGAAGTTATCACCGAGTTGGTGGTTCGC  
GACTTCCACAAACCCGTGTGCTGCCCTTTCGTGGATGGCGAATCACCAGTCTCCTCGATT  
AGT

>RXA02217-downstream  
TAAGCTTTGGGAGTTGGTGCTCA

>RXA02218-upstream  
CAATGATTTATATGTCTTGGACGAGCGATTAAATAGAGTTGGCATACCCCAAATGATAGA  
CCCAAAGTGTGCTGTCCACCGCTCGTTGTAGCATGAACCC

>RXA02218  
ATGTTTGAATCATGACTGTCACAGGGCAGGACCACACCGGAATTATCGCCGCAGTTTCC  
ACCGCGTTGGCTGAGCTAGATGTCAATATTCACAACGTTTCCCAAACCATCATGGATCAA  
TGGTTACCATGATCTTGCACGTTGGTTTCGATGAATCGGTCTTGGATATCGCCACAGTT  
CAGGAACGCATGAAGCCAGTGGAAAAGGAACAGGGCTTGGTTATTTCGTATCCAGTCTGAA  
GCCTTGTTCAACGCGGTTAATGAGATC

>RXA02218-downstream  
TAGGGGGTGCACATGGATGATTT

>RXA02219-upstream  
TCAGGAACGCATGAAGCCAGTGGAAAAGGAACAGGGCTTGGTTATTTCGTATCCAGTCTGA  
AGCCTTGTTCAACGCGGTTAATGAGATCTAGGGGGTGCAC

>RXA02219  
ATGGATGATTTTCTGCATCGCTAGGTTTTACTGACCGTTCCTCGAGGGGAATTCTGGAC  
ACCATCGAGATGATTGAGAAGTATCGTCTTGATATTTCGCACCGTGACCATGGGAATCAGC  
CTGTTGGAATGCGCGCGTGGCTCGATGGAAGAGACCGCGACGGCTGTTTATGATCGCGTG  
ACGTACACAGGCTGCACGCTCGTTGAGGTTTGTGAAGGCATTGAGCGTGAATTGGGCATT  
CCCATTGTGAATAAGCGCATCTCGGTGACTCCAATTGCCCTGGTGACTGCTGGTTGCAGT  
GGCGATCCCGTTGACGTTGCTCGAGCCTTAGATAAGGCAGCAAAAGATGTCGGAGTGAAC  
TTCATCGGCGGGTATTTCAGCACTGGTTGAAAAAGGTGGAACCACCTCCGATATTCCGGCTG  
ATCCGCTCCATTCCCGAGGCATTGAGCACAACCGATGTGGTGTGTGGATCCGTCAATGTG  
GCGTCGTCTCGCGCGGGTATCAACATGAACGCAGTCAATGAGATGGGCAAGGTGGTCAAG  
CAAGCAGCTGAATTGACCAAAGATCGCTCCGCCATCGCATGTGCAAAGCTAGTGGTCTTT  
GCCAATTCTGTGGGCGATAATCCATTTCATGGCTGGCGCTTTCACGGCATTGAGGAGCCG  
GATTGTGTGGTCAAGCTGGTGTCTCAGGACCAGGCGTGGTTAGTCGCGCGCTGGGCAAT  
CTTCAAGGTGCCACCCTTGATCAAGTCGCAGAAGAGATCAAGAAAGCGGCCTTCAAGATC  
ACTCGTACTGGACAACCTGGTTGGTGGCATGGCCTCAGAAGCCTAGGAGTTCTTTTCGGC  
ATCGTTGATCTTTCGCTCGCTCCCACTGCTGAAGTGGGCGATTCCGTGGCAAATATCCTT  
GAGGTCATGGGTCTTGACCAGGTGGGCACACATGGCACCACCGCGGCACTCGCACTGCTC  
AACGACGCGGTGAAAAAGGGTGGCATGATGGCCTGCTCACGTGTGCGCGGCTTGTCCGGA  
TCCTTCATTCCAGTTTCTGAAGATAAAGGCATGATCGATGCGGTTTCGCACAGGAGCAATT  
TCTATTGACAAGCTCGAAGCGATGACCGCGATCTGCTCAGTTGGTTTGGATATGATTGCG  
ATCCCTGGCGACACCCCGGCGGAACTATTTTCGGGCATGATCGCGGACGAAGCAGCCATC  
GGTGTGATGAATCATAAGACTACAGCTGTGCGTGTATTTCCTGTTCCAGGAACTGTCCCT  
GGCGATGAGGTAGATTTCCGTGGCTTGTGCGGTACGCGCGGTCATTCCAGTAAATACC  
GTGGGAAATAGTGAGTTTATTCACCGCGCGGCTTCATTCCAGCACCCGTTACGGGTTT  
AGAAAC

>RXA02219-downstream  
TAGGAGATCCGGGGCCTTTACCT

>RXA02221-upstream  
TTCAATGATATTTGCTCTGATTTTTGGTTCTCGTCTAATTTTCATTATTTTGTACAGCCAG  
CCATCACGACTTCATACCCACCAATTGAAAGTAAAGTCCA

>RXA02221  
ATGTTTACCGCATCCATTCCTACTTATGAATTAGGGTCTTTCAGCAAGGGCTCCTACGTT  
GAGATCAAAGGAACCTTACTTCTACCCTGACACGCTAAATACTTTATTTAGAAATTCTGGG  
GCAAAAGACAACGAAGAGTTCTTTGTAGACGTAACCTCTTGTTCAGAACCCAGATAATCCG  
CATAGCACTCGAGGCCATGCCATTTTCAGTCCGCTGGAATGATCTCGTAATAGGACATATT  
GCCTCGGATATGACTGAAAAATTCCAACAAGTGCGACGAGTTGCAGCTAGTGGCTACGAT  
GCTCGAGTCTCTGCTCGGATTTGGACGAATACAACTATAAGAATGAACGAGATTTTTGG  
GTATCTGTTAAGCTCCCCGATCCAGATTTTCTTGTCTTAAATGATCCTCCCCATGAC  
GGGTTTACCCTCCTCCCTTATGGAACAGCAATCCAAGTCACCAAGGAATCTGATCACATG  
GACGTGCTCTCAGAATTCGTGCCTCCATCTGGACAAGGTCAGATTCTCGTATCGCTACAC  
ATCATTAACGCAGGCGTGAGAAAAGAATGGGATGGCATTGAAGTTCGGCTCGATAATCAA  
CGGATCGGAGAGCTTACAAAGGCCAGTTTCAGAAAAATTCGCACCCGCTAGTGCGACATTTT  
GATGACCTAGGACTTAGTACACTATGTGCTGCGCTCATCAAGGGGTCATCACTAGCTGCT  
GAAGTAACTCTATATGGAGCTCGTGACATGAGCTTTCCGAAGAAGACTTAGAACCTAAA  
AGCTCTTTCCCCATTGCCAGGTTGGTTGAATACCAGTCAAATCCGTTTAAATTATCAAGTC  
CCCAACAGGTGGCCCGGCGAGCAGAATCAACGTGCTCCTAAGTCGCAAAAGTCTTCTTCA  
TCACCTTTTCGACGCTATCGCGGGCCATCGCAACCTAGTAAATCACTCACACCGTTTGTA  
GCGCAGACACCTGCGCCTCAGCCTAGTGATCGATTTATTGATTGGGATTCATTGCTTCAA  
CCGGACGGAACCTCAAGAGCTACGCCATTCCAAAGAGGAGTAACCCGCGGGTTAATTGGC  
AAGCATTTTTCGAATCAAAAATCTCCAAGAATTGACTTTGCAACGGTGGGGCAATGTGAT  
GCAATTCTCCGAACCTTTCGGAGAGCCGACCGACAAGCTTTATAAAGACGGCAGGACTTCT  
TGGCCTTTGTGGTGGGCGCTCATGGCGATAGTCACCTTCTCGTCATGTTGCTGAACCTT  
ATTCCAGGAATTGGTCCGATCTTCCACTTATCGGATTGATCGTACTTGGTCATCACTTT  
TGGACTCGCCGAAAACCTTAACCCACCATTCCGGTAGATCAAAA

>RXA02221-downstream  
TAGATATTCTCATCAAATATCGC

>RXA02223-upstream  
CTTGCTTTTGAGGGCCGCTACGCGCAGCTGTATCAACGATGGAGTGCTCAATAGTTCAAA  
TCCACCACAACTCTAGAGATTTGGGGTAGAAACGAAGAC

>RXA02223  
ATGAGCACCTACCAAGACGATCGTTTCCAGGCCAGACCCCTACGCACCGCTTGGTGAA  
AAGCCAAGCTTTACCCTCACCTCCACCGACTTGGAACCGGTGCAAAGCTGGCCGAAGCC  
CAACTCGGTGGCACCGATATTTCCCCACAGCTGTCTGGTCAGATCTTCAGAAGGCACC  
AAATCCCTCGCGATCACCTGCCTCGACCCAGATGCCCCAACCGGCGCTGGTTTCTGGCAC  
TGGGCAGTGTTAACATCCCCACAACGTGCACGGAGATCCCCACCGGTGCTGGCGATGAA  
ACCTCGGCGGCATCGAAGGCGTAGTTTCCCTCAAGGGTGATTCCGGCAAGCGTGGCTTC  
TACGGAGCGCAACCTCCAGCTGGCCACGCACCGCACCGTTACCTCTTCGCAGTTCATGCA

>RXA02226-upstream  
CTGACACCTCCTATGGCACGCGGTATGTTTAATAAACGTAATTCGAGTTTCGGCGGCCGT  
GTCGCGCGGCCAGGACGACCCTAGCTTTTAAGGACCCACC

>RXA02226  
ATGACTGAGAACCAGACTCCAGCTCCACCTCTGCACCGAAGCCGGGACCTCGCCCGGGC  
CCACGGCCAGGACCCCGACCTGGGGCTCAGGTTGCTGCAAAGAAAGCTGCGGTTGCTACA  
CCTGCGCCGATCGCCAAAACCTTCTAACGATCCTGCAAAGTTTGGTTCGCGTTGAGGCAGAC  
GGATCTGCATATGTACACCTCTGCTGGCGAGCGTCTGATTGGTTCTTGGCAGGCCGGC  
ACCCCTGAGGAAGGTCTTGCTCACTACGGCGCCCGTTTGTGATGATCTGGCCACCGAAGTT  
GAGCTCATGGAACAGCGCCTAATCTCCCACCTGATGATGCGACCTCCATCCGCACGAAG  
GCTGAAGAACTCAAGGCAACCTGCCCACCATCGCTGCGATCGGTGACCTTGATGGCGTT  
GAAGCTCGCCTGTCCAAGATCATCAACAACCTCCGAGGAAGCCAACGAGCGCGCCAAGGAA

CAAAAGGCTAAAAACCGTGAGCGCGCAGTAGCTCGCAAGGAAGAGCTCGCTGTTGAGGCT  
GAAACCTTGGCAGAAAACCTCCTCCGACTGGAAGGTTGCTGGCGACCGCATCCGCGCCATC  
CTGGATGAGTGGAAGTCCATCCACGGCATCGACCGCAAGACCGATGATGAACTGTGGA  
CGCTACTCCCGTGCGCGTGACTCCTTCAACCGTCGCCGCGCGCACACTTCGCAGAGCTG  
GATCGCACCCGCGCATCTGCACGCAAACTCAAGGAAGAATCGTTGAGCGCGCCAATGCT  
CTCAAGGAATCCACTGAGTGGAACGACACCGCCCCGCGCATTCGCGCATCTCATGACCGAA  
TGGAAGCCCGCGCGCGCACACGCGAAATCGACGACAAGCTGTGGGCAGCATTCAAG  
GGCGCCAGGACTACTTCTTTGATAAGCGCAACGCCGTAGCCAAGGAACGCGACCAAGAA  
TTCGAAGCCAACGCAACCGCAAAGCAGCAGCTCATCGACGAATACGACGCACAGATCAAC  
CCCGAGCAGGGCCTCGATGGAGCGCGCAGCAAGCTC

>RXA02227-upstream

ACCGCGTGCCATAGGAGGTGTCAGCCAGATAGGGTGCACTATCTTGAAAAACCGCGCTCA  
GGAGAGGTGTTTGCCAGCAATTTGGGTGGGCAGGATAGG

>RXA02227

GTGGAAGACGTGAATGCAACGCTGATTATCATGCCTGGAAGTCCGGCGCTGGTACCTGAA  
CTGGCACCAGCGGATGCTGCGGGGGCGCGCTTGTTGGCGTCTGTACGTGCAGTTTTTGAT  
GCGGAACCTGGCTAATGATGATCGCCCGATCGAGTTGGTTGGCTCCCGGGATGAGGCGTGG  
TTTACCAAGCATGCGGGAAATCTGCGGGCCTGGGGTGACCGAGCGTGCAAGTTTCTGAC  
GGACATTATTTGCCGGAATTTTGACGCGTGTCGCGCTGGGTGGTTTCGAATCGCGTGTA  
ACTCATGTGCGCGATCGGTTGGGTAGCGTCAACGACAACACGGTTACGGTGCTTGCCCTT  
GACGGCCCCACGGGCTTGACCACCGCGCGCGCTCCGCACCTCGTGCCCGCGCGTCCAAC  
ATCGACGCTGGTGCCGCTCATTGCTGTCTGGAAGCCCGGGGAAGTGCCAGCACCAGC  
ACGCTTATCGACGCTCCCTCCGCGAACCACAGCTCTGGCTCGACTTATCCGCCGTGGCA  
ACAGAAGCGTCAACTGCTCAACTTCTCGACAGCGACGACACACACGGCGTGGGACGCTAC  
GTTGCTCGCTGGACTTTT

>RXA02227-downstream

TAACTTAAGGGAGATCTAGATCG

>RXA02230-upstream

CATCGCATAGAATACTGGTGCAATCGTTTACGTTTCGCTATTAATGTGACACGTATAAGCC  
GACACTTTTAACGAAGCGCAGAAGGAGTGAGAGCAAGAAA

>RXA02230

ATGGGAGAACAACCTCCGTTTGCTAATGGTTCACGCTCCAACAAACTGCCGCTCATCGTC  
ATCGGTTTGTGCTGCATAATGCTGATCCTGTGGCTTAAACTTCCCGGCGTACTGCTTGCC  
ACCATCATTTGGGGTTGCCACGATGAGTGTGATGCGGATGCGCACCTCCACCCAGAACT  
GCCTCGCTGGTTACTTCTATTTCGGCTGTCTGCGGAAGATATTTCCGATGTGCAACATGAG  
TGGCAGCAGTTTTTGACCTCCCCGAGGCCGATGCGCTGGCTGATCGCACGCTTGTCGCT  
CCCGCACTGGCGGATCCAGATTGTGGCGATAAGGCTATCGAGAAATTTCAATTATGAAATC  
AGCAATGCCAATCGCTTCTTGGGCAGGTGGACGCTCGTCTGCAACAAAACCTCGTGGTC  
AGTGAGCTAGAAACACTTCTCAAAGTAACGGACGAGCGCGCACTAGAGCTGCGGGAAACG  
TGGCTGGATGCGCGTAAAGCGGCCCAGAACTTGGGCCGAACATAATCGCGAATCT

>RXA02230-downstream

TAGATCTGCACCTCACCGAGTGC

>RXA02231-upstream

TAAACACCTAAATTGAGCGCTCTATTCCATCAACGCGGGGGCAATTTCTCACGTGTAGGA  
AAAGTGACTATTGCCTGTTAAGGGAGTTAGACTAATCGCC

>RXA02231

ATGACTAGCGATCTGAAGACAATCGGTATGGATTTGCGCAAGTGGCAAGATGCAGTGGA  
GCAGCAATTGCTTCACAGCGTCTCGAGGTAACAGGCGAGGTCCGTGGCGGCCAGCTCATC  
CAGTTCTCGGATGATTCCGGCGCCCAAATTAACATTCTGGCTGTGAGCCTTTTGCCACC  
TTCGCCGGCTTTAACTCCGCAACAGTCGCTTACGGCCACGTACGATGATCAATGATGTG

CTGTCCCTGGTTCGATATCATCGATCCTTTTCGGCACCCCTGTTGCCACCATTACCTGCAAC  
 CTTGCTCAAGGCCCACTGCTTGTGATGAACCAAGTGCAGCGCTGGCAGCAGATCCGCATT  
 ACTGCCCTGGGCATTGATGTTGAGGTCCACGACAATGCAGATGCTTACATCCGCAATGGT  
 GGCGAAACTGTCGGCATGCTGGTTTCTGAAGGTGCAGAGAAGATTGCCAGCGGCAGCGGC  
 GCTGTTCATCCCGGACGCATCCGCAGAGTTTTTCGCACGCGTGTGTCTGCGGAGTACCGC  
 ACCAACACTCTTACCGGCCAGCGTTTTATCCACGCAACAGTTGATGGCCTCTTCGCTTTT  
 GATGTGTGCCTTCCTGATGCACCAGAACTACCTGCCCCGTGACAGCGTGTGTCTGGCAAA  
 GTCATGCTGACTGCTGCCGTTATCCCCACTGAGGTCACCGCTGCGGTGGCTCCGGTGGC  
 GGCTGTGGCTCAGGTAGCTGTGGCTGCGGCGGACAC

>RXA02231-downstream  
 TAAAATTCTGCACAATTTTTTAA

>RXA02238-upstream  
 GCGCTTAGCCAAAACATAGAGCGGTAGGGTATGCTTATCCGATTGAGCAACCTTTCCCG  
 CTCTTAACACTACTGTCCATATACTTTTGAAAAGGTGTCA

>RXA02238  
 GTGACCAACGTGAGCAACGAGACCAACGCCACCAAGGCCGTCTTCGATCCGCCAGTGGGC  
 ATTACCGCTCCTCCGATCGATGAACGTGCGATAAGGTCATTCCAAGTACGCCCTCGTG  
 ATCTTCGAGCCAAAGCGTGCAGCGCAGATCAACAGCTTCTACCATCAGGCAGATGAGGGA  
 GTATTCGAGTTCATCGGACCATTGGTTACTCCGCAGCCAGGCGAAAAGCCACTTTC'TAT'  
 GCTCTGCGTGAGATCAATGCAGGTCTGTTGGACCACGAGGAAGGT

>RXA02238-downstream  
 TAAAAGACCTTATAACTTCACAC

>RXA02244-upstream  
 CACCAATTGTTCTGGGCAATATCCAACCCCCGGGAAAGAAAATGATGAATGCAGCAGACT  
 GGGCGCGTGGTGTCCAACCTTGATCAGGAAGCGAAATTCCA

>RXA02244  
 ATGAGCCTAGAAAAATCCGGCGGATTCCGCTCCAGGACTCCAAAAGCGCAGCAGGAACCT  
 GCTAAGCAGAAGCCGCAGGCGCGTAAATCTCCGTCAAAAGGCCCGGCTCGGGGGCAG  
 GGGCAGAGTCAGGGGCAGCGCCAGGGCCAAAGCAGTGGCAAAGGCGGCGGAAACCGCAAG  
 CCCCCTGCGCAGGCCAGGGAAGTGAGGGCTCTGGGCGTCGATAAGCCGAGAGAAATTGCG  
 TTTGAGGTGCTTGATCGTGTGCGTACCGGTGAGGCGTATGCCAACTTGGTGTGGCCACGA  
 CTGCTGAGCAAGCACAACTCTTTCTGGCCGTGACGCGGCCTTTGCTACGGAAATTACCTAC  
 GGCACCTTGCGTAATGTGGCTTGCTGGATGAGGTCATTAAGGCTGCATCTGGGCGTGAA  
 CTGTCTGATATTGATCCAGAGGTTTTGGACGTGCTGCGTTTTGGGCGCGTACCAGGTGATG  
 TTTACCCGCGTGGAGGATCACGCTGCGGTGCGATACTTCAGTAAAGATGGTTCGGTGGGCTG  
 AAGAAATTCCAGGCCACTGGTTTTTGCCAATGCAATTTTGCGCAACATCACGCGCAAGGAA  
 CCAGAGCAGTGGTTGAAGGAATTGGAGCCCGCGGAAGAGTTGGCTCGCGTTGCGTTCCGT  
 ACTGCGCACCCACGCTGGATTGCGCAGAGTTTCTCACAGGTGCTCCCGGCAGATGAGTTG  
 GAAGCAGCGCTTGCTGCGGACTCTGAGCGCCAGTGGTGCATTGGTGGCTCGCCAGGT  
 GAGATCAGTGCAGAGGAATTGGCGCTGATCACCGGTGGTGACGAGGGCAAGTATTCCCCA  
 TACGCGGTGTACCTCGAGGGTGGCGACCCGGGTGATATTGAGCCAGTGAAGGATGGTCTT  
 GCAGCAGTGCAAGATGAGGGTTCTCAGCTGATTGCTCGCGCCTTGGTGGAAATCCCCGTG  
 GAGGGCACCGATGCCGGCCGTGGCTGGATATGTGTGCAGGTCTGGCGGTAAAGCGGCG  
 CTCATTGGTGCCTTGGCTCGCATGGATCGTGCCACCGTTGATGCCGTGGAGGTCTCTGAT  
 CACCGTGCCCCGACTGATTGAAAAGTCCGTGCGTGGTTTGCCCGTCAAGGTTTCATGTGGGC  
 GATGGCCGCACCATCAACTTGACCGGTGGTTACGATCGTGCGCTAGTCGATGCGCCGTGT  
 TCTGGTTTGGGTGCACTGCGTCTGCGCCCTGAGGCGCGTTGGCGCAAGCAGGAAAGCGAC  
 ATTGTTGAGCTCAACACCCTGCAGTACGAGCTGCTTGAATCCGCTGTGAACAAGGTGCGT  
 TCCGGTGGCGTGATTGTGTACTCCACATGTTACCTGATCTGCGTGAAACCCGCGAATC  
 GTGGACAAGGCATGGGGGCTCTGGAGATGCGAAGAGCTTGAGGCTGCGGAGTTTCATGCCA  
 GGCATGACCGATACCGCGATGAGAAATCAGTGCAGATGTGGCCACACCGCCACGGCACC  
 GATGCGATGTTTGTGGCAGTGTGCGAAAGAAG

>RXA02244-downstream

TAGACCTGTGAGCTAAGTGGGGT

>RXA02254-upstream

TTGATCGCCGATGCCGAAGAAGGCGGATTGTGGGAAAACCTCCTGCAGCACCGCTTCAGG  
TGGACATGGTGCCTAGCTGGTCACGCCTTGGGAAAACCTC

>RXA02254

GTGATCGCGGCGTTGACCGACATTTTGGGCACCTCCCAGCATGCGCTTGATCAAATCGCT  
CAACTCGCTGGAGCCAAAGGACGCATCATCCCGGTATGTGCTGAACCTTTGGATCTTGAA  
GCGGAAGTATCAGGTCTAGACTCTGATGCTCGAGTCATGCGTCAAGTTCGTGGTCAAGTG  
GCGGTAGCTGCAACCCCGGGCAGGTGCGACGCGTTCGAATCATTCCGGACAATCCAGAA  
CCGAACCCCGCTGCCATCGAGGCCATTCTCGATGCAGATTGTGGTCACCTTGGCCCAGGT  
TCCTGGTTCTCCTCTGTGATTCACACATTTTGGTCCCAGGGATCGTTGATGCCTTGGCG  
CAGACAAAAGCAACCAAAACCGTGGTGTAAACCTGACGTCCGAGCCAGGGGAGACCGCG  
GGATTCTCTGCAGAACGACACATCCATGTGCTCCGCCAGCATGCTCGAAACCTTCAGGTT  
GACCAAGTCATTGTGATGCCAAGACACTGTCTCACAACCGAACGCAATCATGTAGAA  
CGAGCTGCTCGCACCTTGGTGCAGAAGTCTCCTTCCATGATGTCCAGGCTGAAGATGGC  
CGTGGTCGATTACACAGTATTCACGATCCAGCAAAGCTGTGTGCAGCGTTGCTGGCAAGT  
TTTGCTGGAGCACGAAAGCGT

>RXA02254-downstream

TAAGGAGTAGGCGTGTCCTGAC

>RXA02255-upstream

GTGTGCAGCGTTGCTGGCAAGTTTTGCTGGAGCACGAAAGCGTTAAGGAGTAGGCGTGTC  
ACTGACGAGTGATATCAAACAAGAATTGGCGCAGGTCCAT

>RXA02255

GTGGCCAAAAACAGTGTTTCGTGCTGCGGAAGTGTCTGCAATTTTAAGGTTTGCTGGTGAG  
ATGCAAGCTGTGCGCGGCAAGCTGGTCATCGAAGCAAATTTGGACAGCATGCAAGTCGGT  
ATGAGGCTTCAGGAGTTTATCCAAGGTTTGTACAACTCTCGAGTCGATGTGCACACCGTG  
AACCCGACTGTGAGCAGGAAAACGCCACGGTATTTGGTGCATCATTTGACAATGCCGAT  
GAAATTGCGCGACGCACCGGACTGGTCACAGGTCTGGACATGTGGTTAAAGGTCTAGCG  
CCTTCTGTGGTTCAGCGGAACAATCAGTGACGCTGAAGCTGCATGGCGCGGTGCGTTTCTA  
GCCAATGGATCTTTAAGTGATCCAGGTGCTTCTCTTCTGTTGGAGGTGTTGTGTCTTGGT  
CAAGAATCAGCATTTGGCACTGGTTGGATGTGCGCGAAGAATTGGGATCGCGGCGAAAACG  
AAAGATTCTCGAGGATTTGATCGCGTCAATGTTCGTGATGCGGAAGCAATTGGGGCACTG  
CTCACTCGAATGGGTGCCCCAGAAAACCTCGCATGTTGTGGGAAGAAAAACGCATCAAGCGG  
GAAAGTCGAATCCGCAAACCGGTTGGCCAACTTCGACGATGCCAATCTGCGCAGGTCA  
GCCCAGCAGCAGTTGCCGCTGCAGCGAGGGTAGAACGCGCCATGAAGATTCTTGGTGAT  
GATGTTCTTGAGCATTTGGCTGAGGCTGGACAGCTGCGTGTGCAGCACCGTCAGGCATCG  
TTGGAGGAGTTGGGCCGGTTGGCTGATCCTCAAATGACCAAGGATGCTGTGGCCGGTCTG  
ATTCGTCTCTTTTGACGATGGCAGATAAGCGCGCCGAAGATCTGAAGATTCCTGATACA  
AATCTGTGTGACGGAAGATTTGTTGGAAGAAAT

>RXA02255-downstream

TAGATGATTGAAGCCTAAAAACG

>RXA02266-upstream

GAGGAAAGTAGCGCTACATCTGCATATCTACCCCCCTTAAAAATGAAGCATAAAACCGCCG  
TGTACCGGCCCTTTTATTGATTTTGACGTAAGCTTGCACCG

>RXA02266

ATGACTCAAGATGAACACCCCGACAGGCCGACTCCCATTTCACATGCTTTTACCGGAT  
GGAAATGAAAACGCACACCAGCTTTCTGTGCTCTAAATCAGGTGGCACATCTGTTGGCC  
TATGATGCGGACTCTTCAATTCATCGGCCTGATGGGCTAAGTCTGGCGTCTATAGAATT  
CTCTTTTCACTGTGGACTGATGGCCCCGATGAGTCCACTCCAGGTGACTGACAAGACTGGA  
ATGAAAAAGTCTGCGATTTCTAACCTGTTAAAGCCATTGCTCGCTGAATCTCTGATTGTG

CAGGTGACGGCAGAAAAATGATCGACGCTCAAAGGTTTTAAGCCTTAGCGAAAAAGGCACT  
ACATACATTTCAGAAAAACAGCCACCCGCCAAAATGC'TTTGGAATCCGAGTGGTTTGGCACC  
CTGACCGACATCGAGCAGGATTTATTGGAGTCGTTGCTCAGGAAACTGCTCGACTCCAAC  
CGCGCATCCAAGGTTTCGTAAAAACCGATCTAAC

>RXA02266-downstream  
TAGCGTCGATCCTTAGGGATGTA

>RXA02267-upstream  
TGCGCTCGGCAAGTGT'TTTGCTTATCGACGTCTCCCCACATAACAATCCCAACTCGAAGC  
ACCAACGATTCAAGCCTTATCAGT'TTTGTACAGGAAAATA

>RXA02267  
GTGCAAAAATGGGGTTTAAAGCTTCGTGGAGAGGATTGTCATCGTGAACAACGTGCAACAG  
TTTCATCGATTTT'TTGATGATTCCGCAGTCTATTATCCCTGCTTCGTCCCGCTTGACCGA  
GCCATCGGCGAACACTTTGATCGTCAGAACAAACCGATGTCCAGATTTCATCGGAACGCTC  
ATTCTGCCGTTAGCCAAACTGGAAGAAGCCGCCAATACACCGGCGATGAAGTCCTTCGC  
GTGTCGGCAGTAATCAGTACTGATGGGCTCGCTGATCTGCGAAGGGATTTTACGAAC'TC  
CCCAACATCGACATCGCCTCGGTGGAAATCAAGCTGGTTCGGCGCAGCCCTCACCAACACC  
GCTTGGTTGGGAGATGTGGA AAAACTCATCCAACAACATCGCAACACTTTCGTATGGGTT  
GAGATTCGACAGCCCTGGTCACCGCAGATATTGTCCGAAAAC'TCCGCCACATGGGAGCT  
GGCCTGAAATACAGA ACTGGAGGTGATAGGGAAGAGCTCTTCCCTCACCGCAGGACTTG  
GTCATGTGCTGCGCACCGCCATCGATGCTGCATTGCCGTTTAAACTCACTGCAGGCCTG  
CATCGTGCTCTCAGGTATCGTGACGAGAAAACCGGCCGACTTCACTTCGGATTCTTCAAC  
ATTGCAGCCGCCGTGGCGACACTTCGTGCTGGA AAAAGGCGAGGCAGAGGCACTGAAGATC  
CTTGAAGGCGATGATGCCGCTCCGCTTATTACGCACTACAAAGCGGCGAAAAC'TGGCGG  
GATTCTTCCGCACTTCAGTACCTGCAATGTTGTTGAACCACTCAACACTCTGATTGAT  
CTTGATGTGTTGGCGGAAGGAGACGTACATCCC

>RXA02267-downstream  
TAAGGATCGACGCTAGTTAGATC

>RXA02271-upstream  
CACTCCCCTATCCTAAGCCACATCTCGGTTTATTAAACTGTTAGTGAATTCTCACCCGCA  
ACACTGGTGTATTTCAAGTTACATCCGTATGGTTATTGGTT

>RXA02271  
ATGAGCTTTCTTAACTCTGCAAAAACCAAGACCGTAGCCCTCACCGCAACCTTCGTTGGT  
GCAGCAACCCTTGCAACTCCTGCAATCGCATCCGCTGACATCGTCGACAACGCCCTCGCA  
GCCCTCCCATCCGGTGAGATCAGCTGCTCCAGGCTGAAAAGTACTGGACCACCGAAGCT  
GATTACAACAGCAAGGTTGCACAGGCCAACGCCTTGGAATGTTGACTCCCGCGGCCCA  
CAGATCCAGGCAGCTCTCGCACGCGTTGACGAAGCAGCAAACCGCTGCGGACTCAAGGGC  
GGCACCGTAGCTGCGCAGGCTGAGGCAACTGAGGCTGCGCCTGCCGCTCCAGCACCTGCA  
CCGCAGGATAACACCGGCAC'TTCTCAGACTGCCCTTGCCCCAGCAGCACCAGCAGCACCA  
GCAGTACCCCTGTGGTTAACCTTGACCTGCAGGATCACCAACTTTCACCATTGAAGTT  
CCAGGAGTTGGCGGGTTTCACTGCCAGATCTATACCAAATCGTCCAACAGTTCTTGGA  
CAGTTCGGAATCAAGATC

>RXA02271-downstream  
TAAATCTATTACATCCCTTAAC

>RXA02279  
NCNGCCAGGGCTACCGCGCTTGTCGATTTCTTGAATCCCAGACTGTTGACCAGCTGAAT  
AACCCCGATGTCCAGACTTACCTCACCGAAGCGGAACTGATTTCGCGATGACTTGAGGTCT  
TGGGCAGTCATCAAATCAAATGGCATTGGACAACATCGATCTTGTTCATACGGCGAGGA  
AACGACGAGCCACTTGCAATCGCCGCAAGATCATCGAGGAAACCGCTTCCCATCCTGAG  
CTGAGATTGCAAAACCTCGAGGCCAGTTCTCCGAGTTCACCATCTTGCTTGCTCAAAGC  
CCGGAAGACTTCGACGTAGCCCGCTACCAGGAGCTTCGTACACAGGGAACTTTGTTCAA



GAAGTTCGCTTGGACAGCATTTTCGGCCAAACATGCCGTTGTTCAAGACACCGGAAACGGC  
GAAGCCATCCTAGATGAAACTATCGGGTACATGATCGGCGCCGGCATGCGTGAAACCACT  
GCCCACCGCCAGCCAGTTTCGCGCAGCTTTACTCATTTGTGGGCAGGCAGGAACGCTCC  
ATTGAAATGGCAGCACTCGCTTTTCGAGGAACCTCAAGCGGCAGGACTTCCCCACCGTGAG  
GAAGAACTGCGATTGGGCATGCAACTCGCCAGGTTGAACCAATTGAAGCCCGCGAAATC  
CTGGAAAAGCTGCTGCTGCCATAATTTCGAGCAGAACTCTGACACTTGATGAACTTGAACT  
GAAGCACTCCTTCTTGGGTGCTACCGTTGCTATCCACGACCCCGAGGCTGCCCGCAGCA  
ATTTTTCGCGCCACGCTCGCGAAAACGCCGAGGGTTTCGGCAACTTCGAACTCGCAGTCCAA  
GCGATGACCATGATCACGGATGTCTCTACACCCAAAACATGCACGAGCAACTGCTGGAG  
GAGCTCAACCACTCTCTCCCTATGCTCAAATGCTTGATGATCAACACCAAGCTGAACTG  
AAACTGCTGGACAGCATCGGCATCGTCCAGGCAGACCTCGGTTCCACCGAAGCGCTGGAA  
ACCTTGGGCACCGCAATGGGACTCGCAGAAAACACAGCTCAGAAGCTATACGTGCAGGAA  
TCCCTCAACCGCGCATACTTCACTTTTGGCCGCCCTGAAGATTGCATCAGCGGAGCAGCC  
GACGCTTCTGCCCTGGCCATGCAAAACGATGACCCCTTCCAATGCAGCTGCCAGTTGGAG  
CAGTGTGCACAGTACTTGTTCGAATTGGGCCACGAACTGACGGCGCAAGCCTGCTGGAA  
TCTGCATTACAGGGTTGAAGGCATCCCCACTGAGCAGGCAGTGTACTACGCAATGCACTG  
TCTTCCATCTATGAAGATTTCGGCGATTCCGCGAAGTCGCAGTACTGGGAGCAGCAGGCG  
CAGGAAAAGCAGCAGCTTCTGGAG

>RXA02279-downstream  
TAACGGCCGTTTAAAGAGTCGAA

>RXA02280  
GCGGACCTGGCTGAAACCATGTTGGGTCTTCTCACCTTGGAGACCTCCCGTGGTTCGCATC  
TCGATCGGTGAGATCACCACGTTGTCCATCACCGAGGATGTGTGCTGCAGCTGGCTACC  
ACGTTGGATGATTTACAGGCAGCTCAACACCATTTGCGCGCCCGGACACCTTGATTATTAAT  
GGCGGCTACATTACGACAGCGATCTGGCTCGGCTCATTTCCCGTTCACTACCCACCGCTT  
ACGGTATCTACTGCTGACCTGCGCGAATCCATGGATCTGATGGAGCTTCCGCGCTGCAG  
GACATTGAGAAAAGCCAAGGCACTGGATGCGCAGGTCACGGAATCATTGAAGGATTTTCAG  
ATCAAGGGCGCAACGAGGGTTTTTGAACCCGCGAGATGTTCTTCCGTTGGTGATCATTGAT  
TCCAAGGCGCAGGCCTCACGGGATCGCAATGAAACACAAAGCGCAACCACTGATCGTTGG  
GCTGACATTTTGGCAACGGTGGATAACACGTTGAGCCGTCAAACAGCCAACATTCCACAG  
GATCAGGGACTGTGCGCGTTGTGCTTGAATTGGAACAATTTCGCTGGTCAGGAAATTGGCG  
TCCACTGATGACACCGCCGTGGTGTGCGGCACGGTGCGTTTGCTCTACGTTACGGCATTG  
TTGTCCAGCAAGAGGCCACTGCGGGTGAAGGAACGCGCGCTGCTTAATGATTTCGCTGGCA  
GATCTGGTTTCTTTGTCTTTGTCTATCCGATATC

>RXA02280-downstream  
TAAGACAATCCTCCGCTAATCTT

>RXA02285-upstream  
TTAGCTTGTGCGACGTCCCCCTCTTCCAACACCTCCGGCTTTGTTTGTTTTCCAACCAAC  
CGGGCTCTGCTGCGGTGGCGACGGCTTTTGTGGCCCACTG

>RXA02285  
TTGGTTTGGATGAGCGCTGGGTTGGTGTGCGGGCTCGTTGATAAATGGGACGAGGGGGG  
GTCGAGAAGCGTCTCTTTGCTGCGGTCTTGTGTGTGGTTGGGGCCGGGCGCGGCACGTC  
GATGAGCGTGGCGAGGTCAGATATGGAGGCGCGGAAGCGGCTCTCCTCTCGCTTGAAGGA  
CGGGTTGTGCGCGTCGAGGTCGAAGATGGCGGACATGAAGTTTTCGCTCGCGGCGTTTTC  
CTCGAGGCGGCGCACGAGGTAAGAAAATGGCCACGTCGAATTCTTGTGGGCGCACGGCTGG  
TACGTAAAGCAGCAGCTCACCGACGTCACGCTGACGGCGCGCGCCTGATCGGACGCCAT  
GCCCTGCAGCATTTTCAAACTCCACACGGTCCGCTACCCACGCTCCACAGAGAGCAAATG  
TGCGAATGCTATGTGAAAAGGTTGTGGCCGGCAACGCCAGGCGCAGGCCCTCCATGTT  
TTCTTTGCGCATCGTCCAATAGAGGACGCGCTTGTAAATTGGCATCGGTGGCTTGTTTGGA  
AGGTTCTGTGGCAACTGGCCAGCCGGTGATCTGCGCGTGGACGTGCTCCATAGGCAAATT  
AGCACCTTGACAGGCGAACCTTAACGCCCCGCCCCGCTGTGTTGACGCGCTCGCGGCC  
GAAGTGCGCCAAGTCTTGATTGCACCGAGGGCATCGGGAAGGTACGCTTGAACACAAT  
TCCGGCTTC

>RXA02285-downstream  
TAGTTCATGCAGCTCTGGATTGG

>RXA02286-upstream  
GCAGCGCACACGCTTTCCCCCTCAGCCTGCTGATACCCCCGTTTGGCCACCTAAAACAACC  
TCTCATCTTCATTTTCATATTCACCTTCATAGGGTTGAATAC

>RXA02286  
ATGAAGAACGCAAAACTTTTCCTCGCGCTCATATCCGCTCCTCTTATCCTCGCTGGCTGC  
AGCTCCACCGTACTGGAACAGCAGAATCCACCATTTCAGCGAAACTGCTTCTGCAGTA  
GATGCCACCACTTCTACCTCCTCAAGTACCGCCACCTCTGCCGTGATTGATGACGATCCG  
GTATTCGACATCATCGACATCGTCCTTGCCCAATACCCCGACAGGATCATCACCACATT  
GACCGCGAAGACTCCTCCGATCAATACGAAGTCGATGTTGTGGTTGGCCAAGAAGTCCTT  
GAACCTTGATGTCACCACCACTGGCCAGATCCATACCGACGACCGCGACAACGATGATGAT  
GACGACATCCGCGAAGCTCAGCGAGCCACAGTCACCGCAGCTCAAGCCATTGGCCCTAGCG  
CTGGATCAATACCCAGACGGAATTATTGATTCTGTTGAATTAGACGAAGACGACGGCCAG  
CTGAAATGGAAAAATAGACCTCGATGACACTTCCGGCAATGATCTTGCTGACGTTGAAATC  
GCAGCAGTT

>RXA02286-downstream  
TAAGCACGCGCACGGAAAGCCAC

>RXA02287-upstream  
TTGAAAAAGGAACATTAGTGCCAGTAACAAGAGCCCAGTTGAATTCAAGCGGGCAGAGAC  
ACATCTGGCCCTCAAAATTTTCCTTTTACTGGAGACCACT

>RXA02287  
GTGTACTCAATTTTCAGAACTATCGCCCCGAACTCTTATGCCCCGCACCGATCACGTTTTC  
GACCTGATGGGCAACGGAAACGCCTGGTTTCGTCGATGCCCTAGAACGCCTCGGGCGAGGC  
ATCATCACCGTCCGCCCCACAGTTGAAACCGTGGCCGCGCGGACACCTACCACCGCGTC  
ACCCGCGCGCCCGGCGGTGCGTACCACCACTATGGTGCTGGTTTCACCAACACCATGACC  
ACGCTTGCCGACGTCGCCCCCTCTCCCGTATCCCACTTCTTTTAGTTGTGGGCACTGCCCGG  
AGCGCCGGGCTCGCTGTTTCGACATTGACCGCAAGGACTCGCACGTGCCGTAGGTGTG  
GAAACCTTCACCGTGCATGCAGATGACGTTGCTGCGGTAACCTTTCAGGCTTGGAATAAT  
ACGCCGGAACACACACGTCATCCTGGAAATCCCCCTATGACCTAGCAGCTGCCACAGCC  
ACCGATCCAACAGTGACTACATACCTGCTGCGCCCCGGATTTCAGAACTCCCGATGTCA  
CCGACCTTGTC

>RXA02287-downstream  
TAGCTCTACGCAATGCCCAAAAT

>RXA02294-upstream  
TACCTCACCTGGCAACAAATCCAAGGAATGTAGATAAGTCGGGGCAAACCTCTAAGAAATC  
ATCCTGGTTTGTGGCAGGGAACATTCTTAGGATGGGAGGC

>RXA02294  
ATGGCAAAGACAAAACCTAGAAAGCATCTCCGAGCGCAACTCGGATGATCCGCTTAGTTAC  
CCCGACCTGACTCTTGACCAATATCCACAACAGTCACAGTCGTGGTCGCCGAAGACACC  
CCAAACGATAACTTCTCAGAACTTCTCCTCGGCGCAGCAGAATCAACCCGTCTTTTAGGA  
CTCGACGAGCTCCACATCATCGCTCCATCAGTCCACCTACCCGCTCTCGCAGTAGCAGCC  
GCCGACATCGCACACCATCTGCCAGAGAAATCCAATTCTGTGAAGCCGAAACCTGCACT  
CATCTCCACCCCGACGATGACACCTATCTCAGGGCTGAATCCGTTGCTCAATTGGGTACG  
AAGCTGAAGTCTGCG

>RXA02294-downstream  
TAGTTGTTAGGAGCCACCACAGA

>RXA02295-upstream

TTCCCATGCTAATCCGCGAAAAATGGCACTTCAACAGCCATATACTTTAAACAACACAAAT  
GATGCAAGACTGATACCGGGATGTGATAGGAGCGCACCAC

>RXA02295

ATGGGGTTGGAATTAGCAGCTAGCGGGTGGGGCATCCTCATCGCAGGCGCCGCCGTAGCC  
GGATGGATCGACGCAGTAATCGGCGGTGGCGGACTCGTCCTCATCCCGCTGATCCTCGCG  
GTCATGCCGCAACTCGCACCTGTGACAGCGCTGGCCTCCAACAACTGGCAGCCGTCACC  
GGCAGGGCATCGGCGGCATTCACCCCTGGTCAGGCGCGTCAAACCCGACAAAAAACTGCTT  
GCGCTCTACGTTCTTGGTGGCAGCTGTGTGCTCCGGTGCAGGCGCCCTGGCTGCGAGTCTC  
ATTGACAAACAAATCATGCGACCGCTGATCATCGTGTGATGCTGGTCGTGGCCTGATC  
GTGGTGTTCAAACCAAACTTCGGAACCGGCGAAAGCAAAGCCCTGCCCACCGGATGGAAA  
CGCTGGGCGCCATCGTTGCAGTCGGACTCATCGCAGCCTACGACGGCATCTTCGGACCC  
GGAACCGGCATGTTCTCATCATGGCGTTCACCGCACTGCTCTCCCAAAATTTCTGTTC  
TCCGCAGCCATGGCGAAGGTGCTAAACACCGCAACAAACCTGGGTGCGCTAATTGTATTC  
ATCATCGGCGGCCACATGTGGTGGACCCCTAGGACTCGTGCTGGCAGTCGCCAATGTGCGA  
GGCGCACAACTCGGTGCCCCGAACGGTGCTTGGTGGCGGTACCAGGCTAATTAGATACGCA  
CTACTAACCCCTGGTTGTCGTCATGAGCGTCTACCTCACCTGGCAACAAATCCAAGGAATG

>RXA02295-downstream

TAGATAAGTCGGGGCAAACCTCTA

>RXA02296-upstream

GCATCATTTGTGTTGTTTAAAGTATATGGCTGTTGAAGTGCCATTTTCGCGGATTAGCAT  
GGGAATCACCAGTATTTCTGGACGGTTAAGGATGATTTCAT

>RXA02296

ATGCGTAATCAAACAATCGCTGCGGTGCGAGCTTTGGTCCTGCTCACCGCCGCCACGCCC  
GCGATCGCTGCCACCCCGGCGACAGCTGGAAACGGAATCTATTCCATTGACATGGGCGAC  
GAGCAAAAGCTTACCTGCGTGCTTTTCGATGAGCCCTCCACCGAAGCGCACGTCGTCGCC  
AGCTGTGCTGCGACTTTCCCGGTGACCTGGAAGCTTCTCGACGGCGCTCACGAACAAGCC  
GCGAAACTTGAAATCACCCAGGCTCAAGACGGTGAACCTCGGTGACAGCCAGCAAGCAG  
CCGTTGATCACCACGATGATTGCGCCCACCAGCATCACTAAGCCCATCACTGTCAATAGG  
CTTGTGGTGTTCCTGGTGAGAAATGAGGTTGCTTTTATGCTACCGATCCTGATGTTTTA  
CCAGTGCTGATCACGCCGACTCCTATGAAGTGTTGACCGATTCCGCTGCTAAAGTGAAA  
GCGACATTA

>RXA02296-downstream

TGAAATAAACGTGGATCAAGGAG

>RXA02297-upstream

TGCTGATCACGCCGACTCCTATGAAGTGTTGACCGATTCCGCTGCTAAAGTGAAAGCGA  
CATTATGAAATAAACGTGGATCAAGGAGTCCGGTGCCCAA

>RXA02297

TTGAGCGATAAAGAACCAGACCCCCACGAACAAATTCAGAGAAGCCATCCCGCAAGGTT  
ATTGCACTTCGTTGGTGCATCGTAGCGCCGCTGTCGCTAGCCGTGGGGTGGCTTTTTACT  
ATGTGGGGTGTGCCAGCCGCATGGATCCTCGGGGCGATCCTTGTGCGCGGTGTATGTGCG  
CTGACCACAGGGCAAGATCTTCCGATGGCCAAGGGGGTGCATGTTTTTGGTTCGCTCAATC  
GTGGCGATGCTGGCGGCGCTGCCTTTGATTAGTTCTTCTGGTTCGGAACCTGTTTCGTTTC  
CTCATCCCGGCTCTGTGATTTCTTTTACCATCGCGGTAGGCATCGTTGGTGGTTTG  
TTGCTGGCAAGATCCAGGCCGAGATTTTGCCGGAACCTGGTGTGCTGTCCATGCTGGCG  
GGTGGCGCGTGGTGTATGCCGATTCTGGCCCGAGAGTTGGGCGCTGATTTCCGCTATGTG  
GCGCTGACGCAGTACCTCAGGTTGTTGGTTGTGTCCATGACGTTGCCGCTGGTGACGCAC  
TTTTTCGTCCTTGGCGGGGCGGATTTGGGATCGCCGCCCTGAGAAATGGTTGGACGTGTTG  
AGTTTGGGAGAGTTCGGGACGTCGATAAGCGTTTATCGCTGCTGGTGCTCTTCGGTATT  
GTGCTGGCCGGCGAACCTCTCGGCAGGTTGCTGCGCTTGCCTGCCCTGCGGTGATGGGG  
CCGCTGATCCTGACCGTGCTGGTGAGTTTGTGATTCCAGATGATCTCAGCCTGCAACCG  
CCAACCGTGTTTAAAGATTATCGCGTTCATGGCGATCGGTTGGATGTGTGGCGGTCCCTTG

AATATGACCGCGCTGAAGGTGTTTTCTAAGCAGCTTCCGGCCACGTTCTTGTTTATTTTC  
GCGCTGCTTGCGGTGTGCGCAGGTGCGGCGGGGCTGCTCACCTGGTGGTTGGATATCAGC  
TTCCTTCGAGGCTTACCTAGCAACCAGCCCTGGAGCTCTGGAGACGGTGTGGCGCTGTCC  
TCGGAAGGATCTGCAGGCCCCGGTGGTGGTCACGATCCAGATCATTGCGACTACTGGCAATC  
TTGACCATCGCCGGTTTGATCCCCACGCTACTGCGACGCATTTTGCGTAGGGATCGT

>RXA02297-downstream  
TAAAGGCCTTCTAGTTCAGCACC

>RXA02298-upstream  
AAATCATAGCGTGAGATGACAAGGAAAGGAATATTTTCGATCCGGCAACAACCCCCGCGTC  
AGGTGGGATTATGCCGAAAAAATCGCTACGATAGCCACTT

>RXA02298  
ATGACTCTTCAGAGTTCTGATAAACGTTCTCCTTCACTGTTAGACGCCCTCCTCCGAGGTC  
TTTGTCCATGATTTGGCAGCTTTGTCTCCCACTGATGCCACTGCATGGGGTATCTCAGGC  
TTCGAAGGTGATCTTCAGGATTTCTCTCCTGACTATTGGAATGCCATCGCCGAACGCAAC  
CGCGACATGGTTGCCGATGTTGATGCTTTTGATGACGGCACTGATGACAACGATGACGAA  
GAAGATTTTCGATGACGTTGACCGCGTCACCGCTGATGTTCTCCGTGATCGCGTATGCCTG  
GATCTGGCCCTGCACCAACAGGGCGAAACCTTAGCGAATCTCAACAACATTGATTCCCCA  
GTCCAGACCATCCGCGATACCTTCTCATCATGCCCGCGAGACGGACGATGATGTGGAA  
AATCTCCGCGAACGTTCTCTCCCGCGTCCCCGACGCTCTCCACGGATACTGTGAATCACTC  
GCTGAGGCTGCCAGCCAAGGCCATGTTGCAGCGGTCCGCCAGGTGGAAGAAGTGGTGTGCG  
CAATGTGAGGACCTCGCTGATGAGGACTCCGTTTTTGACGACCTTGGCTTGGATGAAAAT  
GATCCAGTAGTTGTAGAGGCCCAGGAAGCTTTTGACGAGTTGCCGGTTGGTTAGCAGAG  
CAACTGGCTCCGCATGCTCCTCATGTGGATGCGGTTGGCCGGGATCGCTATGAAATGTTT  
TCCCACCTGACGTCGGCGAGTTTGTAGATCTGGATGAGGCTTACCAATGGTCCCTGGAA  
CAGCTGCGTGACATTGATGCTCAGCAGCTTCAGGTAGCCCAGCAGCTGTACGGCCCTGGC  
ACCACGATCCGTGAGGCCATGAAGAAGCTCAATGCTGATGAGCGCTACCTCATCCGAGGC  
ACTGATGCTCTGCAGGAGTGGATGCAAAAGACCGCTGATCAGGCAATCGCTGATCTAGAT  
GGCGTTTCTTTCAACATTCAGAGCAGGCTCGACAGGTTGAGTGCTCATCGATCCTGCT  
GGAAGTGGCGGCATTTTCTACACCCCAACGAAGCGATGATTTCTCCAGGCCTGGCCGCATG  
TGGTGGTCTGTGCCTAAAACCCAGGAAGTCTTCCACACCTGGCAAGAGCTCACCACCGTG  
TTCCACGAGGGTGTCTCTGGCCACCACCTGCAGATCTCCCAAACCTTTGGTGGAAAAGGAT  
CTGAACCTGTGGCGTCGAGTCGCTTGTGGAACCTCGGCCACGGTGAAGGTTGGGCGCTG  
TACGCAGAATCTCTCATGAAGGAATTGGGATACCACGAAGATCCAGGCAACCTCATGGGC  
TACCTTGATGCTCAGCGACTCCGTGCAGCCCGCGTGGCCATTGACATCGGAATTCACCTG  
AACAAGAGGAACCCAGAGTGCACCGGCCTGTGGGATGCGTCTTATGCGCGCAGCTTCCTG  
CGTGAATAACGTCATGAATGAAGATGCGCTGTACTTTGAGCTCAACCGTTACCTTGGT  
TGGCCAGGTCAGGCCGCATCGTATGCCATTGGTCAGCGACTCTGGTTGAACCTGCGCGAT  
GAGGCCATTAGCCAGGGGCAACCTTGGCGCAATTCCACAGCAAGGCATTGTCTATGGC  
AGCATCCCGATGGGCATTTTGCGCGATCAGGTGCTGAAC

>RXA02298-downstream  
TAGAAGGCCTTTAACGATCCCTA

>RXA02300-upstream  
GGGTCAATCCGGTGAACACGGATTTTCGCGCCGGTGAATCTGACGGTCAGCCAATTGCGGG  
CAATGCTGTCCAAAGCGGAGCGTAAAGATAAGGATCAGAA

>RXA02300  
ATGAAAACCTTATGCAGTACTAATTGCGGTGGCAGGGTTGGCACTTGCTGGGTGTAGCTCG  
TCGGCTCCTGGAATCTGGCGTGCCACTGAACCCGCAGATGCCCTACCTTGAAATAGCCGAT  
GACGGCACGCTGTCCGGAACCGACGGCTGCAACAGACTTTTTGGTGGCTGGGAAAAAGAC  
GGCTCTACCATCACTTTGGCGGCCATCGGTATGACAGAAATGTACTGCGAAGGCGTCAAC  
GATTGGCTGTCCAGATGCACACCGCCACCGTCACCGATGCCACCATGACCATTTTCAAC  
GAGGCCGGCAGCAATATTGGCGAGCTAAAACGC

>RXA02300-downstream

TAAATGCTTCTCGACGTCAAAAG

>RXA02301-upstream

GCTTCGCATATGTCTGGATCTTATTGGATGTATGAGTCAGAGATCAGGGAGATCGCGCAC  
TAACCGAACCTGGCCAGTGCAACAGGATTATGTTTAAAGC

>RXA02301

ATGGATCTTGCACTGGCTCAGGTTGATTCCACCGTTTCGGGGCTTTATGACGCCCTCGAT  
CTCATCGGCGTGCTGCTGAACGGAATAATCGGTGGAACGATCGCCAGGCAACGAGGCTAT  
GACATCATTGGCTTTCTGTTCTTGGCGTTATTTTCTGCGCTGGGTGGCGGAATGATCCGT  
GACATGCTGATTACAGAGGGGACTGTCGCGGCGATCGATAATCAGATCTACCTTGCGCTC  
GCGTTTTCTGGCGCGCTGATTGCCATGGCGGTGAACCTTTAAAGGCAGGGTGTGGGAGCTG  
TTTAAAGTTACAGGCGATGCCATTGTGTTGGGCGTCTGGGCGGTGACGGGTTCGGTGAAG  
GCGATGAATGCGGGGGTGGCTCCGCTGCCGAGTATTTTCATGGGCGTGCTCACCGCGGTG  
GGTGGTGGCATGGTGGCTGATGTGGCTACTGGCCAGACGCCGACGATTTTGGTGGCGGA  
ACTCTTTACGCTGTGCCTGCGACGCTTTCGCCACGTCAATGGTTATTTTCATAGCTTT  
GACCAGGTAATTCTGGGTATGATTATTTACCGTTCTTGGGTATCGCGTTGGCGGTTACT  
GCGTATTGGTGGGTTGGGTCAATCCGGTGAACACGGATTTCGCGCCGGTGAATCTGACG  
GTCAGCCAATTGCGGGCAATGCTGTCCAAAGCGGAGCGTAAAGATAAGGATCAGAAA

>RXA02301-downstream

TGAAAACCTTATGCAGTACTAATT

>RXA02302-upstream

GGCCAGGTTTCGGTTAGTGCGCGATCTCCCTGATCTCTGACTCATACATCCAATAAGATCC  
AGACATATGCGAAGCTAATGAAGGAAACGAGGAGCTGATA

>RXA02302

GTGGCAACAAATCGTACATCTTCCGCTGGTGTATCACGTCTGTTCTCGCATCCGCTTTG  
TTCGGAGCGATCTTTTTCATCTCTGGGGCGATTGAGGCAAAGGCGGAAACACTTGTGGCT  
TGGCGTGTCTTCTAACAGCGGCATGCTATTTGCTTGCCCTTCTGCACCCTGCTGGTCCG  
AAGGTGTTTAAAGGAATTTTGGGACACACTAAGGTCCCAACCTCGTCAAATTCTGTACTTT  
ATCTTCTCGTTGTACTCATCACGCTTACGCTGTGGCTGTTTTCTTGGTTCGCCTAAGAGT  
CATGCTTTAGATGCCCTCACTTGGTTACCTGTTACTGCCCATTTTCCCTAGTAATTGTGGGG  
CGGTTTTTCTTCGCTGATTACATCACCAGGCTGCAGTGGATTGCGGTGGGAATCGCGCTG  
ATCGCAGTAACCTTGAAATTTGTCAATTAGTGCGCAATTATCGTGGGTAACTTTTGCCATC  
GCTGCGGGTTATGCACTGTATTTTGCCTTCGTAAATACTCGGGGCTGAACAACGCTTTT  
GCTTACGGCGCAGAAAGTTTGTAGCGTTAAGTCCCTGGCATTTTTCATGCTCGCCACTGTC  
GAGGATCCGCTGTCTAACGCCATGTTGTCAATGGTTATTCTGGCGGGCCTCGCTGGCGCA  
TTAGCTATGGCGTTGTATCTAGCCGCCTCAACTCTGCTTAGTATGCCGATGTTTGGCCTG  
CTCAGTTATGGTGAACCAATCTTGCTGTTTGTGTCAGCACTATTA

>RXA02303

GATCCTGATCCAGCAGACCGCTATATTGCACATCTTCCCGATCGCACACGCATACTGCG  
ATGATCATGTTGGGTTCTGGCCTTGATCATTCCATGCCGGGTGTCGCATTTATCGGTGGT  
GTGAGCGTCGATGACGTCCCGGAGGTTCGAGGCGCGATTTTCCACCCGTCGAATCCGACG  
GGCCGCTGGGCTGTATCGTTCCACAGCGGTGGTTGGTGGCGCGGTTCCGGTGATGCGTTG  
GAGTTCCAGTGGCGTCCAGAGGTTCGCGGACGCTGCGGAATTGTCCGGCACAACCATCCTT  
GACCTGGACTATCCGCTGGCCCCAGGCCATAACCTCCACGATATGAATGAGGTTGTGGGC  
AAGGCGGTTCGGTTACGCCCCGCCACCATAATCCGGTGTGATCACGGGTTGGGGTTATTCC  
TCGGGCGCGCGTTAGCCGCGATTAATGCATCGCTTTTCGACGCCCTGGTCTCTACCTTT  
CCGACCTGGGTAGCGTCGAGAAGCTCCCTGCCGAAATTCGTGGAGACGCTGTAGTGCCC  
GCGGCGGCTGCGTGGCCGACGACCTTTGTGCAGATCGCGGCGCAGGATGAGATCGCGGAG  
CGGCCAGGAGAGCTTGGCGACGCGACCGTGAAGGAATACGTTTCCCGCCACCGTATTTCC  
ACACCGAAGGTCGCGCGCGAAAAAATCACCGACGTGGCGGAGTTCCTTAAACTGTTTGC

>RXA02303-downstream

TAATGTGCCAGCAGGTTGTAAAT

>RXA02304-upstream  
CTAGCCATCATTGGTAGTTCCTAATTGTTTCCGTACAGTATAGCTCCAGCACAACTTCTG  
AGTGCAAGTTTTTTATAACAGGGCAGTAACGTTTACTGGT

>RXA02304  
ATGAAAACCTCCCCGTCTGCTGAAGATCCTCAGCGCGATGGTGGCTGTCACCTGGACTTCTC  
ATTCCAACGGTGGTCCCCATGGCCGCCGCTGATGCTGCTGAACCTGTCCGACAACGTTCCC  
GATCGCACCCAAATTGCCATCATCAACCCTGATGGCAGCGTGCAAGAATCTGACAACGCC  
GAAGAATCCCGCCCGCATTTATCCCTGGCCAAGCTGTATTTGGGTTATTATGTGTTGGCT  
CAAGGCGCGGAAGAAGATATTGAAGTAGTCCCAGATATGATCCGCTACTCTGATGATTTT  
ACCGCGGATTATTTGGAGAGCGAATACCCGGAAGCAATTCCTGAGGTATTGATGCCTTC  
GATTTGGAAGACACCGAATGGGCTGGTTTCTGGGGCAATGCAACTACCAAGTGGCGTGGAT  
ATTGCGACGTTTGTAGCAGCACTCATCGACGATCCCACGGCGCAGCCCTTGCTTGACGCA  
ATGTCTGACACCGCTGAGTATGCGGCGGATGGCTACGCCCAGAACTTTGGCACTTTTACA  
TTGTCCGATGTCACCGGTACTAAATTTGGTTGGTCTGATTCCTCGATGTGCATTTCATCG  
GTCAGCTTTGGCCCTGGTTTTGTGATCGCTGCCAACACCTACGGTGACGCCGAAACGCTC  
ACCGAAGATGTCCAAGATTCCGTGTCTTCGCTGTATCCGGAGGAAGTAACCACCGCGATC  
GAGGAGCAGGTGGATCAGCTGTGTGAGTGCGCTGCAGAGACTACGCATTTGGGAATGCAC  
ACTGGCGCGGAGCTGAAAGCACAGCTTGAGGGCACTATTTATGGAAAAACCTCAGCTTTT  
TTACCTAATTCAGCCCCAGCGCCAGCGTTTATTTACAACCTGCTGGCACAT

>RXA02304-downstream  
TAGCAAACAGTTTTTAAGGAACCTC

>RXA02307-upstream  
TTTTGCATTAACCCAGGTAGGGGCATTGTTCGCAAAGCCCAACTACAGCAAGGTGCGTAC  
GCTGGTGGCCAACTGAATACGTTTGAGGAGAAGGTTTTCT

>RXA02307  
ATGAGTGGCACCGCCATCATGTACGACACGACAGTTGTTCCATCGAAGAAAGAAAATCGCG  
CAGGCTTGGACTGGTTATGTGGATCTTCAGGGAAGCTACCGCCTGGTAGATACGGTGGAT  
GGGGAAGTTGGCGTTGAGGTGCTGATTTCCAAGGATCGGGAGGGGCGTTTACTCCAGATT  
CCGTTTAGTTATCGTTCCGCGAGAGATTAACCCAGAGCAGACACTTTCCACATTGGAGCAT  
GGTGTGTTGGGCAAGCGTTGGGTGACTAATGCGTTGGGTGACCCGGTGGCAGTGCGGGAG  
TTTATTTCGCACTATTTTGACGGGCGATGATGGTGCAGCTCGTAGCGATGGCGTGAAGGGC  
TATCTGGATATTAAAGGTTCCGGCGATGCT

>RXA02308-upstream  
GGGTGAGATTGGAATGATTTTCGGCCCCGGGCGCTCGAAAACCGTGATAGACACAATGAACC  
GAGCAAATCCGCCAGGAAATAAATTAAGTAAGGAATATCC

>RXA02308  
ATGAGTGAAACCCAGTCGAATTCAGTGTGTCAGCGGTAATGCCTGCGCAGCTCCCTCCAGGG  
CCTGCCGAGCGTACTGTGTAATCTACGGTGTTCGCGCAGGGGATCAGGTGCACATTTTA  
AGAATGGAGGCTTTTGATTCTGACGCGAATATTGTTCGGCGAAAGGGACATTGAGGCGCAT  
GCTGAACAAGTCTTTAAGAACCTGCAAGCAGTAATCCACGAGGCAGGAGGAACGATCAAC  
AACATTGTTTTCCACCACTACTTATCTTGCCGATGTCACCGATGCTCCCGTTGTTAACGCT  
GCTCGCTCCCGCTATTTACCCGGAGAAGTATTGCCACCCACACCGTAATTGGAGTTGCT  
GCTCTTGCTCGGCCACAGTTCTAGTCGAGATCTCAGCGGTGGCCTATTTGGGGGACCTT  
TCAAAAGAC

>RXA02308-downstream  
TAGATACATGATTATTTTTCAT

>RXA02314-upstream  
TGATACCACCGAAGTATCCGGATTACCATATTGAAGCTTCGACCGTCCGAGATACCCG

CCGTGCACAACAGCAAGCTCTCATGGACACGGTGCACTAA

>RXA02314

ATGGAGTGGTACCAAGTGCGCCGACGGGCCCCGACAACCTGCTCATTGTCTTTTATAGCA  
GCGATGCTCGGAGCAGCCTCCATGGTGATCGGGCCATTCCCTTAACGACCGCACTATCGAA  
GGCAACTCCGGGCGCGCCTTGGCACAAGTAACCAACGTCCGGCAGCTACCGCACAACGGTG  
GATTTCCAAGATGAAAACGGCATCTATCACTCACCAGCCACCGGCCCTGTTGTTCCCCACG  
GGACTGGGCGAGGGGCAACGCGTGTGGGTGAACTACGCCAAATCAGATCCAGACCTGGTC  
AAAGTAGAAGGCCGCAAGTGGACACTGTCCATCATCCCAGCGCTTAGTGTGCGAGCTGTC  
GCCACCGCTACCTGGTCAGTACTATGGCTGGGAGTGGGCAGATTCCGAAGACGATCCGAC  
GACGCCAACGAAACCACAGTG

>RXA02314-downstream

TAAAGCTCTATGCCGGGAGCATT

>RXA02324-upstream

GAAGGTCAAAAACTTGACTTTATTGAAAACAATTTCCATTAGAAGTGTACACTTGCGT  
CGACTCTATTGAAAATGATTCCCAAAGGAGGGCTTTCAC

>RXA02324

ATGGCCACAACGACCCAGTCACCGTGCTATCAGGATTTCTCGGCTCCGGAAAAACCACA  
TTGCTCAACCAGATCCTCCACCACCGAGGATCCCGGAAAATCGCAGTCATTGTCAACGAT  
TTTTTCAGAAATCAACATCGACGCAGCCCTCATCGCATCCGAAGGCCACCTCACCCGCGGC  
GAAGACCGCTTCGTGGAAC TGACCAACGGATGCATCTGCTGCACCC TGCGCGAAGACCTC  
GTGGATTCCGTCGGCGAACTCGCCAGCAGCGACCGCTTCGACCACATCGTCATCGAATCC  
ACGGGTATCTCCGAACCAATGCCGGTAGCCGCCACATTTGAATGGCAGTGGGATGACGGC  
ACCCGCTGGCTGACAAAGCACCGATCGACACCATGGTCACCC TGGTCGATGCCACCCAA  
TTCATCGACCTCATCCGCAAAAACACCTCCCTCACCGAGGCTGACATGGGCGCAACCGAG  
GACGATGAACGCACCATCGCCGACCTACTCACCGATCAAATCGAGTTCGCCGACCGCATC  
TACATCACCAAATCCGACCTGGTGGACCGCACTGTCTCGAGCAAACCCGCGCACTAATC  
GCCAGCATGAGTCCACGCGCCCGCATTGACTTACTCATCGATGGCCTCAATGACGGCTCC  
CCCATCACCGACGACATCCTCGGAGCTTTCTCTACGACGAAGCCACCGCCCGCGCTAC  
GAGGGCTACACGGAAGAACTCGAAAACCCGCACACTCCCGAAACCGAGGAATACGGCATC  
AGTTCCGTGGTATTCGGCTCTGACCGGCCGTTCAACAAGGATCGCCTACTTCAGGTACTG  
CGTTCCACCAGTGGTGCTCGTTCCGTCCAAAGGCTATTGCTGGATCGCTGATCACCTCAAC  
ATCGTCCAGGTCTGGCACCAAGCCGGCCCCAATTTGAGCATTGCCCCGGCCGCTATTGG  
GCCAATTCAGAGATCACCCCGGCACTGAATTGGTCTGATCGGCATCCACATCGACGGC  
CCCACCTTGCTCGCACTGCTACAAGGCGCGACGCTTACCGATGCGGAAGTGGCGGCACTG  
GTTTTG

>RXA02324-downstream

TGAGTTCCCTCAAGTCCGTGAATT

>RXA02325-upstream

GGGCAGAGATTTGAAGATGGAGACCAAGGCTCAAAGGGAATCCATGCCGTCTTGGTTTAA  
TACTGCACCCGTCTAATGAAAATCATTACTATTAGGTGTC

>RXA02325

ATGATGGACCATGCACACGATTCTTGCTCACCAACTCTGCGCCGTGATTTGGAGGTCAC  
GGCCAGCTCCAACCTGAGAAAGCTGTGATTTAGCAGCGCCGCACGAAGGGAAGGTTGCC  
AATATAACGAAGGTGACCTCCTCAAATATGGAGCACACCATCACGCAGGCCCTCAAAAGCT  
AAGGAGGTGGTGGTGCTCATTGGTCACTCCCTGCTGCCACATTTTCAGGATTTGAAAAA  
GACATTTCTGCACTTTTCAGGCAGGTAATAAAGGGCGATTTTCTGTAGCGATTGTTGATCCT  
GATCGCAGTGAGATGTGGTTGCCAGATTTAGGCCAAAACAGATTCCGGTGGCATACTG  
GTGAAAGATGGCGCCAGCATTGCGGAGTTCAACTCGCTCAACAAGGAGCCGGTTGCACAA  
TGGCTTGATCATTTTGTGTCGCGGGAAACGATCCCCAATGAAAAAGAGGGGGACGTCGAT  
AAGCAAATAGACCCGCGCCTGTGGCGGGCAGCGGAATTGGTGAACGCCGGTGATTTTCGC  
CGGCGTTGGCGTTGTATGAGCAGTTGCCGCGAGGATGCGACGGTGAAGCGGGCGCACGCG  
CGGGTGTCCGTATTGGCGCGGATGTCTGTGGCGGATCGGGGAGAGGATCCGATCGAGAAG

TCGCGCCGGGATCCAGACGATGTGAACAAGGCGCTGGCGGCGGCGGATATGTATGTGTTG  
ATGAATCAGCCGGACACAGCGCTCGCGCACCTTGCAGCACTATTGCCAAAACCGGAGGCT  
GCCCGGCGGATCGTGGAGTTGCTGAACTTGTTTGATCCGCTGGACCTGGTCGCATTGGAA  
ATCAGGGCGCAGGTGGGAATGCAATGAGC

>RXA02325-downstream  
TAAGAAAACACTTTAAATATTCT

>RXA02331-upstream  
TGCAGCGTGCATTCCCACCATCGGGTCAAGAACTATCCGCCAGCCCCTGTCCAACCTCC  
TCAACTAAAAAGGCAGCACTTAAAAAACACTATGGAACCC

>RXA02331  
ATGGAACATAACGGCGGTCTGTTTCTACGCCCCGAAGCTCACCTCAGATAATCGGATTGAT  
GATGTCCCGGCGCTCTCACTGATCCTTGCCGATGCAGCACAGTTTCATCGCGGACGCCACC  
ACAGCCTGGCAGGAGGACACCGAATACACCTGGGCTATCTGCGAGCAGACCAGTGTGAA  
CTACTGGCACTGGCAGGCCTTGATCCCAAGCAGCGCACACTCGAGGTCGTGCCCCGAGGT  
GATCCCGCCACCCAATTGCCCAATGATCCAGTGCTCGCTCCGAAAACCATCGGCGATGCT  
GTGGCGGAGGGCCGCGACACCATCACCAGATGGGCACAAGGCTATTTAGAAATCAGCCTC  
ACTGAT

>RXA02331-downstream  
TAGGTTCTCTCCGAAATGGGCAC

>RXA02336-upstream  
CAAAATCCACACGACACAATTACACAAATTTTACCTTGTGCATTGAAAGCCGTCAGCCGAT  
TAGCGTTAAAGAAAATAAAAAACCACAAGGGGAGCACACC

>RXA02336  
ATGAAAGACACCACCGAGATCAACTGGCAAGGCTACGCCGATGGAACCGCAATCCGCGAA  
GCAGTCATCCACTCCATTGAACGAGAAGTATCAGCGGGCGAGCAGCCAACCCCAAACGAT  
CTTAAATTTCTCGGGCTGTTCCAGCACCGCGCCGGGTATGTGGGCTCGTTGATCACCAGT

>RXA02336-downstream  
TAAGTGTGGGAGCAGGCTGGCT

>RXA02337-upstream  
CACAAGGTAAATTTGTGTAATTGTGTCGTGTGGATTGTAAGGTTTTGTAAATCTAGTT  
AAATCATGAGGTCATAAGCTTTTCGGGAGGTTGTCAAAGG

>RXA02337  
ATGTCGAAGCTTTACGCGGGGGCAAGGATCAATGCACTGCGCCGAACCCATCAGCTCACC  
CAATCAGCATTGGCCGACAAGCTTGATCTCTCCACCAGCTATCTCAACCAGTTGGAAAAT  
GACGGACGGCCACTCACTGCCACGGTGCTTCTGCAGCTGATGAAAGTGTTCGATGTTGAG  
GCCAGTTACTTCTCCCCTGACCGGGGTACGGCCACTGCTACCCGACTGGCTGAAACCTTG  
GCGATGAATCAGGGTCCGACGATGTTCGATGGATGATCTTTTAGATTTCGCGGATCGTTTC  
CCTCAGTTAGCGCAGCATATTATCCAGCCTGCTGAGGTTGATCCCACGCATAGTTCTGCG  
CATGATTTTGTTCGGGATTATTTTGCCACCCACAAAACTACATTGATTGCTCGCTCGATCGC  
CTTGAGAGGAGTTGGCAACTGCCATTGGTCAGCCGGGACTTCGGGTTACTAGGCTCGCG  
CAGTTGCTTGATGCGGAGTACAACATCACGGTGCGTTTCGGGGCGCCGATATTACTGGC  
CGGAGGCACCTTTGATCCCCAATCGCGTCAGATTCTGCTGCGGCAAGATCTCAGCGAGGCG  
CAGCAGTGTTCAGTTGGCGGAGGAATTGACGTTTCTTGCTCATGCAGAGCTCTTGGAT  
ACCCTGACCACAGATCAACCGGATCTCCCTTCTGAGGCAGCTATCCGCTGGCTAAGGTG  
GGTCTCTCCCAATATTTTCGCGGCTGCTGTTGTTCATGCCGTACACCCGCTTTTGGAAATC  
GCCAGGATAAGCACTATGACATCGAGTTGATCTCTGAGGCGTTTGGAGTGCTTTTCGAG  
TCTGCATGCCACCGCTGTCTACTCTGCAGCGTTTCGGGGCGCTCAGGGGTGCCGTTTTTC  
TTTGTGCGCTCGGATCGTGCAGGA



>RXA02338-upstream

AAAACGTGTCTAAAAATTCAGTTTTTATTGCTGCTGATCACCTCTTGAAGAACTCAACCC  
AAAAGTGCTTCAAGTTATGAGAAAGTGAAATCCAACACCC

>RXA02338

ATGAAAAAGAGCATCGTTGTATTTGAAGTCGAAGGCGGCTCCGACAAGCACTTCGACGGT  
CACCGTAAAGACACCATGCCTATCGTCAACTCCATAAATGATGCTGGCTGGCAGGCAGAG  
GTTGTGTACTACCGCCAGAGTGGACCGAAGGTCTCTTTGAGTACGTATCTGAAAACCTTC  
GACGGCTACATCTCACGTGTCAACCCAGGCAACATCCCAGGCGCGAGCGCGGCTACTTT  
GACCTGCTCACCCGCCGTGCCGAAGCAGGGCTCGTGGGCATGTCCACCCCTGAGGAAATG  
ATGGCATAACGCGCGAAAGATGCGCTGGTCAAGCTATCCCAAACCGACCTGGTGCCATCC  
GACACCGAGGCGTACTACGACGTGGAGACCTTCCACAAGGTTTCCCAACCTCCCTGTCC  
TTCGGTGAAGCGCGTGTCAAGCAAAAACCTGGCTTCACCGGCTTCCGCATTTGGCGCGT

>RXA02339

CCCACCGACAACCTCTTTTCATATCCTGCACAACGCTATGATCTTCTCACACTTGCCCTT  
GAAGTTAGGATTGGGGACATGGTTCAAATTAATGACATGCTTGCCCCCTCCTCCAGTAAAA  
CTTCCGGAAGATCCTGCCCTCGGCGCCGATCCAACCTTTGACCTCGACAGCGATTGCGCAT  
CCTGACAGCCCATTGGTGTGGGCGTACCGAGCTGAAAATCTTATCAAATCTGCATCAAAT  
GATGAAGAGAAGATTACGGCCTACGCTTTTGGCGCGACGGGTACCACCGCAGTCTCGAT  
CGTCTGCGTGCCAATGGTTGGAAGGGTTGGGGTCTGTCCCCCTTCTCTCATGAGCCAAAC  
CAGGGAGTGTGCGGGCTATCGCTTCCCTAGCTCTTGCTGCGAAGCTGATTGGTGAGGAC  
AACGAATACGATCGTTGCCGCCAGATGCTCTCTGATGCGGATCCAGAGTCCGTGCGAGTC  
CTACTCGACAAA

>RXA02339-downstream

TAAACCACCAAAAAATAAAACAAT

>RXA02340

GAGCGCGTGTCTAAGCAAAACCGTGGCTCCACCGGCTCCGGCATTTGGCGCGTCCAGTTG  
GTAGACAAGGAACCTGGCTGCATCCATCGAGCCAGGCACCGCACTGCCATTGGACACTGAA  
ATCAAGTGCACCGAAGCAGTCGACAACCACACTGAAGTCCGCAAGCTCGGCGAGTTCATG  
GATTTCTGTGACCAGTACATCATCGGCGACAACGGCATGCTCGTTGATATGCGTTTCATG  
CCACGCATCGTCGAAGGCGAAATCCGCATCCTTCTCGTCGGACCACACCCAGTGTTTCGTC  
GTGCACAAGAAGCCAGCAGAAGGCGGCGACAACCTTCTCCGCAACCCTGTTCTCCGGCGCG  
AAGTACACCTACGACAAGCCAGAGCAGTGGCAGGAACGATTGACCTCTTCGCAGACGCT  
CGCCCAGTCATCGCAGAAAAGCTCGGCGGCGACAACATCCCATTGATCTGGACCGCAGAC  
TTCATGCTCGGCGATGTGCTTGACGGCAAGGACACCTACGTGCTCGGTGAAATCAACTGC  
TCCTGCGTCGGCTTCACCTCCGAGCTGGACATGGGCATCCAGCAGCTTGTGGCATCAGAG  
GCCATCAAGCGCATCGAGGAATTGCGCGAGCTTACTGTT

>RXA02340-downstream

TAAAACCTTGCTTCTCGACGTCT

>RXA02341-upstream

CGCGACTGGCGGAGAAATTCTGTGTTTCGCGATGCTTCGGGCACCGTTACACCCCTCAACGC  
CGGTGAAATTACGCACCTTCGCCTGCAGTAAGGTGACGGT

>RXA02341

ATGGGGAATTCACCTGAGAAACATATTGCAGAGGGAGACCGGATCCACGTGATCTGACA  
TCTCCTTTATCCGCAATGTTGTTCCCCATTTTGAACCTATTGTGATTACTGGAATCTGT  
TGGATGGGCATCGGCTTTTTGGATCAGCTTCCAGGAATCGATGGCACCAACCCCGCCGAT  
AGCTTCCCCGAAGGCACCCGCAATCTTCTAGTGGGTGTGTGGGCAGTACTTGCTGCATGG  
CGTTTCGGTCTTCTTTAATAAGGCAACGTCGACTCCGCGTGATCTTGAGCGACCGCAAA  
CTGCTGGTCCGACGCGCGGGTCTGCGCACCGGGTTCGATTCCATTCCACTGAGCTACATT  
CAGCGAGTCCAACGTCGGCGAAACACCCCTGGTCTTAGGTGTTGGTGACAC

>RXA02347-upstream  
ACGGTTGGAACAGAGCTGCACCTTTAATCAGGCAGTTGCTGGCCAACTGAGTTAGCCTAA  
AACGATGAAGAAAAATCCTTTGGTTGAATGGGTCTGGGTT

>RXA02347  
ATGGATGAACTCGGGGTTGGCTGGTGCCAAATGCGAGAAAGATTCCATCACCGGAAAAGCA  
CCACATCCCGTGAACAAGCCACTGGTCACCAAATCCATTATCAGGGCTCTAGGCGATGTC  
CCCGATGTCATGAGCAACCAGGACATCAGCCTTGTGGTGGTGGATTGTGGAATTCGAT  
ACCATTACTCCTCCAATCGCAGAATCCCTCATGCGTTCCGTCAAAGCTGTTAACGGTGAG  
ATGCACCCGCGATATCCACCGCGACAGCAATGGCTGCGATCAAGCATTTCTCCAACACT  
TTTGATGGACAGATTAACGCT

>RXA02347-downstream  
TAAAAGGCCTGTTATAGACTGAT

>RXA02349-upstream  
CTTCGAGTGCTGTGGCGAAAAATCCGAACCTCAAAGAACTAGCCTAAGAACTAGCCCCAT  
GAGCTATCCCTCAAAAAATTACTGATAGTGAGGTTTTTCGC

>RXA02349  
ATGTCAACTGCATATTTTATTTGCGCACGGAAACGATACGTACCGCCCAACGGAGCATTC  
AGCGGTGCGTGCGCGATGATGAACTCCACCTTGCACCGGTTGCCGGTTTGGTGATTAC  
CATATGGAACGTTGGCGCAGGGAAGTGGTTGGCGATGCTTTGGTGTTTCAGCCGTTTTAGT  
TTGGAGGTCTTGGGCGAGATCGCTCGGGATGATGTCACCTTGAGAACAGAGATCGTTCGT  
CCCGGGCGCACCATTTGAACTTATTGAAACCGTGGCTGAAATCAACGGCAGAGTGACGATT  
CGTGCACGCGCCTGGTTGCTGAAGACCTCTGATCTTGCCCATATTTCTGGCGATACTTTT  
GAAGCGTTGCCGTCAATGACTGAACTGGCA

>RXA02352  
ATCTACAACACATCGAGCACGCTCAACGGCTTCATCGCAGACAAAGACAACCTCCCTGCAA  
TGGCTTTTCGACGTCCCCGGCAGCGACGGTGCCCTCTGAAGACTTCGGTAATTTCCTTTCA  
AAAGCCGGCACCATCGTAATGGGATCCACCACCTATGAATGGCTGCTCAAGGACCTAGAT  
TTCATCAGCGATCCCCACAAGTGGACCGATGTGTATGGCGATCGCCCCACGTGGGTGTTT  
AGCAGCAGGAACTTGGAACCCCGGAAGGAAAACCTGTCAAGGTAGTAAATGGAGATGTC  
GCCGATGTTCTCCCCGCCATACTGGAAGAGAGTCCAGAGAACACTGATATTTGGATCGTC  
GGTGGTGGCGATCTGGCGGGTCAATTCTTTGATGCGGGTGCATCGATCGGATCATCTTG  
ACCATGGCGCCAGTGTTTCTCGATGAAGGGCAGCCAGCGATGCCCCGCCGGATCGAAAGT  
AATCGTCTCCGCACCGTAAATGTCCGCGAGGTTGGACAATTCACCGAGATCACCTGGAG  
ACGATTAAAGGGGCT

>RXA02352-downstream  
TAATTTGTAGAGTTTTGGGCAGA

>RXA02356-upstream  
TTGGCAGTAGCCATGCGTTCTGCTCCTGACCTTGAACAGCGGTCCCAATTTAGACCCGCT  
AAACCCACAATGTGTACTGGTGCTGGTAATTTAGTAGAAC

>RXA02356  
ATGGCAACGGTCACATTCGACAAGGTCACAATCCGGTACCCCGGCGCGGAGCGCGCAACA  
GTTTCATGAGCTTGATTTAGATATCGCTGATGGCGAGTTTTTGGTGCTCGTCGGCCCTTCG  
GGTTGTGGTAAATCCACTACGCTGCGTGCTTTGGCGGGGCTTGAGGGCGTGAGTCGGGT  
GTGATCAAAATTGATGGCAAGGATGTCACTGGTCAGGAGCCGGCGGATCGCGATATCGCG  
ATGGTGTTCCAGAATTATGCTCTGTACCCTCACATGACGGTGGCGAAGAATATGGGTTTT  
GCGCTGAAGTTGGCTAAGCTGCCGCAGGCGCAGATCGATGCGAAGGTCAATGAGGCTGCG  
GAAATTCCTGGGTTGACGGAGTTTTTGGATCGCAAGCCTAAGGATTTATCGGGTGGTCAG  
CGTCAGCGTGTGGCGATGGGTCGCGCGTTGGTGCGTGATCCGAAGGTGTTTCCTCATGGAT  
GAGCCGCTGTCCAACCTGGATGCGAAATTGCGCGTGCAAACCCGCGCGGAGGTCGCTGCT  
TTGCAGCGTCGCCTGGGCACCAACCGGTGTATGTCACCCACGATCAGGTTGAGGCAATG

ACGATGGGCGATCGGGTTGCGGTGCTCAAGGACGGGTGCTGCAGCAGGTTCGACCGCCC  
AGGGAGCTTTACGACGCCCCGGTCAACGAATTCGTTGCGGGCTTCATCGGCTCGCCGTCC  
ATGAACCTCTTCCCTGCCAACGGGCACAAGATGGGTGTGCGCCCGGAGAAGATGCTGGTC  
AATGAGACCCCTGAGGGTTTCAACAAGCATTGATGCTGTGGTGGATATCGTCGAGGAGCTT  
GGCTCCGAATCGTATGTTTATGCCACTTGGGAGGGCCACCGCCTGGTGGCCCGTTGGGTG  
GAAGGCCCCGTGCCAGCCCCTGGCAGCCCTGTGACTTTTCCCTATGATGCGGCGCAGGCG  
CATCATTTTCGATCTGGAGTCGGGCGAGCGTATCGCT

>RXA02356-downstream  
TAGTTTCGGACGTGGGGAGGCGT

>RXA02358-upstream  
TGAAGGTGGACGCTGCTTTTGGCAAATGACCTCGAGACCTCCGATATTCCCGCTGCCCT  
TCGTCCCTAGTACACCCAAAGTTTATGAAAGATAAAAAATC

>RXA02358  
ATGGTTTCTTATAGCGTGCACGGCGCACTAGATATCGACGGCAGCCTCAAAAACTCACC  
CTCGATTTCTCAATAAACTAGCCACCAATCCAGCTTCCCCGGGGCTTCATATTGAGCCC  
ATCAAAAACAGCATCGACTCCCGCGTCCGCACAGGTCGGGTCAATGATCAATTCCGCGCA  
GTGCTTTTGGAGCTTACGACGAATTTGATCATCACTTTGTAGTGGGTGGGTTTATCCCC  
ATGATGATGCCATCACCAAGGCAGGAAAAATCCGCTTGAAGTCAACTCTG

>RXA02358-downstream  
TAACGGCATTACTCGACTCATCG

>RXA02360-upstream  
AAGTAACTAAAGTTCGAAAGTATTTCCGAACGGTGTGCGCCTCTGCGCATACACTGTATT  
TTTAAAGAAAATTCTTCTCAATTCTAAGGGTGAATATCCA

>RXA02360  
ATGCGTGGTGACGTTCAAAAAATAACCAAGGTTTATGACGGCAAGCACCGAACCTTGGAA  
ATCCCCGTTTATCAACGCAATTACGACTGGACTGAAAAGCAATGTTACGCCTCTTTGAT  
GACCTCAGCGAAGTGGTCAAAGAAAACACCGTCAACATTTTTTTGGAGCTGTGGTTGGT  
AAGCCTCAAGGCAGCTGGACCTGGGTGTGTCATCGATGGACAGCAGCGTCTTACAACAATC  
AGCTTGTTCATGCTTGCCTGGTACATTCTTGCCTGCGCATCTGAAGTTGAAGAAGGTGAG  
TTTAATGCTGGCTACAACATTGATCTAGCCACATTGATTGAGGATGACTACCTCCGATCC  
GGCAATGAGGGAAACCTCAAGTTCAAGCTCAAGCCAGTTAAAAACGATAATGAGGCTTAT  
CAAAAGCTCTTCGGCCCAAGATCTGAATTCATAGAGTCTTCAAACTCACTGCTAATTAT  
CGCTACTTCCGCAATGTCTTAAAGCAACCGATCTCACCGCAGCTCAACTATGGGAAGCT  
ATCGAGAACTCAGGGTCATGTATCTTGACCTTGAGGAATTTGATGATCCGCAGCGAATC  
TTTGAAAGTCTCAACTCCACGGGATTAGAGCTCAGTGAAGCTGATAAGGTACGCAACTTG  
GTTCTTATGGATCAGGAGCTCAAAACCAAGAAAAGCTCTATGAGCAGCGTTGGAATCCC  
ATTGAAGTCTGCGTGAAATTTGATACCGACAATTTCAATTCGCTGGTACTTAACCTCAA  
ACCGCGCGCACCCCAAGAAAGCAAGATGTTTATGAGGAATTCAGAAATTCATCCGTAAC  
TCCAAGCTCCCGGTGCAATTCATCCTCGACGATATGTACGAGTACGCGAAGCTGTACCGA  
GATCTCTTAGGTGCCACTACTGGGTTTATAGCTGCCGATAGGTGTCTTAAGCGTTTGTG  
CCTGTCTATGGGCGATGTGGTTTTGCTTTTCTGCTGCCTGTTCTCAAAGATGCTAAAGAC  
GGCATCATCACCGAATCAGACTTCTCGGAGTTCTAAAAGTTCTGGAATCCTATTTATTC  
CGCCGTTTTGCAGTCGGGGTTGCTAGTAACGCCTTAAAGCAAGATCTTCTCCACTGCTTAT  
AGCGACATCAAGAAATTCTGGACTCCAGGGCAAAGTTATAGCTCACTGCTGGCCTACATT  
CTGAAACGTCGCGATGGTTCCGGGCGTTTTCCCTCCGACAGTGAATTCGCTGAGAACTTC  
GCAACCAAAAATTTCTGGAATATTCATAACGAAAACAGGCGTTACTTATTTGATTGTCTA  
GAAAATGCCGATTCCAATGATGTTCTGACATCCAACAAGTCTGGATGAAGGATCTCTC  
TCCATTGAACACATCATGCCACGTAGCCTAAACGATCAGTGGAGAGCTGAACTCGGCCCT  
GAATATGCTCGAATTCATGAGACTTGGATTAATAGAATTGGTAACCTCACCATCACCGGC  
TACAACCTCCGCCTATTCAAATCTTCTTATGAGCGCAAGCGGACGATGGAATAATGGATTT  
TTGGTATCCCCCTATCGCATCAATAATTTTCATCAAAAAGCAGAAGCATTTGGTCTGAAGAA  
CAGCTAATTGAGCGAACCGAGCTGCTCACTCAAGCAGCGCTGGACTACTGGCCCCCTCCA  
AAAGAAACCTTCCAGCCACCACAAGCTGTGCTTCTTACAGAATCCTTAGATAGTGATCTT

TCTTTCCGCGGACGCGAAATTGTCGCCTTTGAATATGAGGACTACAAGGAAACGGTAACG  
 TCCTGGGCAGACATGCTCCAGAGCGTTCTAAAAGTCTTGAACCAATCCTTCCGCCAGGAA  
 CTCATAGCTTTGACCAATGAAGAAATCTGCCTGGCAACTTCAAACAACAGTAACAGCAGT  
 CTCCGTGAAATTGACCACGGGCTTTTTGTAGACACTGGCTCTAGTACGAGTGTAAGATT  
 GGCTTCTCCGAGAGTTTTTACTCAACTGGGGCTAGAGCAGGAAGCATTTGGTTTTACC  
 CTTGACCACTGGCAAATGATGTAGAACCCGAGATGATGAACTCGAGGTAGAGGTAGAA  
 AAGAAATATCCGATTTGACTAAATTCATCCCACAGTTAGAAGAAGCTGAGAATCTCGAG  
 GGGGCGGATACAGAGGTTATTCCTCTCCTCTCAAAGCTCAAGGAACAACCTGACAGCCTTT  
 AGCCCGGAGAAATCCTCAAGCAGCCCTAGGGGGCTACCTGTTCCAGAATTCCTCAAACAA  
 AATGTGATTGAACAACTAAGCGCAGAGCACATCCTTGCTGTACTCACTCAACACTTTAAT  
 ATCGCATCCATGATGGGTGATGACTATTTGCTCGAAGAGCTCAGGTCAGGCCGCTTAAGG  
 GAATTACTGCAGCGTTTAGAGGAATTGGATAGC

>RXA02360-downstream  
 TAATAGCCGTAGTCGGTGGTCAA

>RXA02361-upstream  
 TAGAGGAATTGGATAGCTAATAGCCGTAGTCGGTGGTCAAACCTTTGACCACCGGACTCCC  
 CTTTAAGCACAATCTCTAGCTTTTATTTAGGCTTGGAGTT

>RXA02361  
 ATGGAACCTCTCTCCCACTTGCTTGCTCTTGATCCTGCCTCCCCCTCGTTTGACTGTTTAT  
 AACGAGTCCACGGGTGCGCGTTTGGATTTCTCCGCCATCACTCTTGATAACTGGGCGTCC  
 AAGGTTGGCAATATGCTCCTTGAGGAATTGGATCTGGAGGAAGGCTCGCTCACTACTATT  
 GATTTGCCGGTGAGCTGGCAGGCCGCAATGATTATGCTCGGCGCTTTAGCAACTAGTGTT  
 GAGGTCTCTTTTGATGATCCCGAGGCAGATGCCATCTTTACCTCCCTCGATAGATTTTCC  
 CACTACAAGGGCCATAGTGATGTGCTGATTGTCAGCGAGGATCCTTTTGGTCTGAGGTT  
 GTTGAAGGTGGCGGTGAACCTGCCTAATGGTGCCATCGATTTTGGCCCCACAGTGCGTTTT  
 TATGGCGATCAATTCCTCCAGCCTACCCGCACATTGCCGGAATCATCCAGCATTCTGAT  
 GTTCCGGTTGGCGCCAGAGTTCTTGCAACTGGTTGGTCAGATATCGAGTCCTTCAATCAC  
 CAGGTTTTAGAACCCTCGCAGTGGGTGGCTCTGCAGTAATTGTGACCGGACTGGCTGAT  
 ATTGAGCGTTTAAACCAGATTGCAACCAATGAGAAGACAACCCACCGTATC

>RXA02361-downstream  
 TAGGCAAATTTCCGTTACTACTA

>RXA02362-upstream  
 ACAATTGTTCCCATTCGCATATCTCGTGTCACCAGAGTCGCTACAGTAACGAGAACTT  
 AATTATTTGATCCGATTCTTCCGTTCAAAGGCCTCATTCC

>RXA02362  
 GTGACTATCTCTCGCCGACTCAAACAAGAGCGCAGTTTCGCTGACGATCTTCAAGATCTC  
 AAAACTCTCAATGATCAACTGCGGTTTACAAACGCCAAATTGCAAGCTCGCATCAGTGGT  
 ATTGGCAATGATGGAAAGAAAATCACGCGCCCTACCCACTCCTTGCGCTGGATTTTCAG  
 CTGACCGTTGAAGAATACGAAACGATCATTGCAATCTTGGTGGAAGCAGTTGGCGGAAAT  
 CAATCCAAGCCAGCGATTCTTAAAGATCTGTTTATAGAATATCCACTCGTCTTCTGGCA  
 GCGCTTCTGGAACCGCCATGCTCGATGCTCAAGAAGGTTTCTGGCCTGCGTTCTGGAAA  
 CGCACTCAGGTGTAGTTCCAGAGCATGTATACGACGCGATCCGTAAAGAAGTAAAT  
 AGCATCCGCAAAAATGGCCTAGAAACTTTTCTCTCGCTGACCTCAATCGACGCGAATAT  
 GTCGGACTCATCCAACCTTACAGTGCCCTTTCTGCAAAAGACATGCTCGCCTTGGTCAAA  
 TTTATCGATCACACTCGAGCAGAAAACCAAGGATGGGATTCTGGTGAGGACTTTGCATCA  
 TATGCGAAGAGTGTCTTCTCCTCCGGGGACAACCTATTAACCACGGAGTCGCTCAAGCAA  
 TTAGTCACCCACATCCCTGCGCGTTCCGTCGACTTCATCGCCAGAGTCTATGAACCTAAC  
 AATTGGTTACCGCGACCTCAAAGACCTCAATGAAGTAGAAGCCTTCGTAGGTACTCATGGG  
 CTGCCGGAATTGTCTTTCAAATTTCTTCTGGAGTGCTGAGCGGCGAAGCTGAACAAATT  
 GCCGAAAAGACGAAAGCAGCACCAGCAAGCCTGGAAAACCTGGAACCTCCGCATCTCTAT  
 CTGGATCCACAGAGTTTGAACCTAGTCTTGTTTTCCAGCGATCTCTAAAACCTGCAGCA  
 CTTTCAGATTCCAGCACCAAGATGGACAGTGATTTATGACGGAACCTCCATTAAAGTTCTGT  
 CCCGAACAGGACTGGTCTACGGAGGTTTCGCCGAATACCGTTTGCCTTTAGACAAAACCG

CTCTCCAGCTTGAGAGTCATCACTCCAACAGAGAAATCCCTAATTCTGATTGAAGGATTT  
GGCCACAAGAATCCCATTTATGTTCTTTAAGAACAACGGTCAGCCATATGCAAACCAAGAA  
ATGCTCAGTGGCAACGCTGTACAGCTATAGTCCCAGCTGCAGCAATCATTTCGTGCACGT  
ATGCGAGCTTCCAAGACTTTCAACTATCAAGACTTGGGTCCCCTTGTCGGATGGAACAAG  
TGGGTCAATCGTTTCGATCCCCTCAACGAGCTGAATCGATCACAGTCTCCACGGTGGC  
TTCAGAAAAGAACTCCCAGTTTCGACGCAAAGTTGATGTTCAATGGATTACTGAGGATCTC  
ACGATCGAGAATCTTCAAGGTCTCGATCATGAGCCCGTTTTTCCACACGAGTCCCCGCATC  
GAATTCCCCACCTCTGGATCAAACCTGGGTAAATTCAGTATTCACAGATTCTTCCAGATGGC  
AGCCTCATCGAAATGGAAGATTACCCAGTCGAACCTGAAAACCTTCGGATACGAACCTAGAC  
CTCTTCGAAGAATCCGACGACCCCTTGGGTCTGGGCAATTTTTAGTAACCTCTGCTCAAGGAT  
GAAAAAGTCTATGAAACCCGCAAAATTCATCTCGCGGAAGGCCTCGATCTTTCCCTAACA  
TTCAGCGAGGCGGACCTGAAAATCGATTTAGGTACCCAGCATCAATCAGGGACAAACT  
GGCTTAACAAGACTTTCGCCCGTTTTAGTTCCAATTCGAAAAGCACATCAGGTTCCCA  
GATGAGATCATCGGGCTTGATGCATTACCTCTCAAAAAGCGTTTAACATCGCAAGCGGT  
GATTTCCCTGAGGACTACAACCTCGACGTTTTTCATCACGCCCTCCGCAACTTCACTACCAA  
GTACCTGTCACACACAGCCAAACAAAGTGGGAAAAGCACAAAGACGACACTAGATTTCAAT  
GACTTTGCCGATGGAACCTCCAGATCAGATTCCTTAATGAAGTCTATGATCCAAACTTG  
AAAATCATTAATAATGGTGGCATAACAAGAAACCTGAGTCCAGTGAGCCTAAATACTTAAGC  
AAAATTGGTTCAAGCAAAGTGTGGTCTATCCCTATGGATCGCATCAAGGAACCTCATGGAT  
GATGATGCCCAATTCCCTTTTGATCGCGGAGTGGTTCGCTGAAAAGTAAAGACCAGCACCGA  
GAGAAGATCATTAGCGAAGCTAAGCGAACTGGAAAAATCTCCAATGCAGCGCTTAAGAGT  
GCTCGTCTCAACCTCAAGCAAGTTCCCACATTGCAACAATTGAGAAAAAGCCCTACTA  
GCTGCGGCTGAAATTAAGCTTTCTACCGTGGAGTTGGAACCTGGTTCGGCACACTTCTAAG  
AGACTGGAAGGCTGGGCATGGTCTGCGCTCAACCCGCTTGATCCACCAATCAAAGTCGAT  
TTCCAAGGAACCTCAGGCTCACTTCCAGACACCCACTTTCGTCGTTGGCCCTTTAATCGTG  
GAAGTGAGAGAAAAAGAGTTTCTCTCCCAATGGCAGCCAAAAGTTCCTCAGTTAAAGCC  
GTGGTTGCAATGATCCCTCATTGTAATTGGACCCCTCAATTTGATCCTTTCTCTCACACAC  
CGATGGATGTTTCGCTCCACGAAGTGGGAAGGTCTTACTCCACAAGAAATCCGCACAGTG  
TGGGACGCCCGATTCAATATGCGCCATGTCTTAGCGCAGCGTGAAAACCTTCATGTGAAA  
TCGATTCAAGATTTTGACGATGCCACCAGTACCTATCTCACCAGTGATCCTCGGGTGGCA  
TTAGATGAATTGGATAAGAGCTCAATTCCGTCTAATTTCCCACTTTGAATCATTCATCCGA  
TCCGGATTAGCTGAGCTTTCTTTTGAAGTTGACGACACAGCCGGAGATATCCATCGCGTT  
CCCTGGATCGGCCTGATCCAGGAAATGAACGACCTCAGAATTCTGCAGATACAAGGCTAT  
GAAACAGAAGAACGAGCCATCGAACGCCGAAATTCGCAGAGCTACATCCGTGAGATAGGA  
GGCAGTGAATTGTGGAATATCTTAAAGGAAATTCAGAGGGATTGTCTCTTGCTCAAAAA  
TGCGCACCAAGCCATGAGATTAATGTGATTGTAATTCAGGCTTGGAAGCTATGCGC  
AATGGGCTGGGCGCCGATCAGTTTACGCGCCGAGTTTATTTACGACAGACTCACGCCATCGA  
GCTCAGCTTGAATGGTTGGAACCCGCCGAGAGCTCAATGATCTCGGCCAGCTCCCAACG  
CTCTTCGATTTTCGCCGAGAAATACGAGTACCTCATCGATCACTTAGGTGATGATCGCATC  
AAGGTCAGTGCACGTGAGCTGTCTACTCTTGCGTCGGAACACCGTCGCGGCAACGCTGAA  
AACTGGCTTTATGCACCATATGTGTCAATTCATTTACAGCTTGCTTAACCGAATGATCGCT  
CATGAAGTAATACGTCCGATCGCTCAGATCAATTACTCACGGCACGATTGGGCAAACGCT  
GCTCGGCTGATTCCTCGTCTCACAGGATTTGACCTGGTGAGTGCCGAAGCGAAAGTGCTC  
AGCGCAATAACAACAACAATATAATCCCAACTGCAATT

>RXA02362-downstream  
TAAGGATCACTATGTCCAACGCA

>RXA02367-upstream  
GGCACTTGAATCCGGACGCTAAGTTGTTGATACATCAACTTATTTCTTGCTATACTTGA  
GGTCACGTTTCCTCAGCTCAGGAGAAGTTCCGGAGAAGTCC

>RXA02367  
ATGTCAAACGCGAATAATATCCCGTTGAATATGAAATCAACAACCACGCCCTGGTACC  
GCGCTAAACCCACAGTGCGAAGACGGCGCCAACGTAGAAATCATCACCTCCCGTGAAGTC  
CCCCTCGGCGGACCACGCGCCATGACCGTGCACCGCACACTCCCCAACGCCAGCGCTCC  
CTCATCGGTGCCCTGGTGTGTTTGTGGATCATTACGGCCCCGATGATGTCTACTAACCAGGT  
GGCATGGATATGGCCTCCACCCGCACACCGGATTGCAAACAGTCACGTGGCTTTTGAA  
GGCGAAGTCACCCACCATGATTCCGGCGGAAATCACGCAGTCGTGCTTCCTGGCGAAGTC  
AACCTCATGACCGCCGCGCAGGCATCTGTACACCGAAGTTTCCGCCACCTCCACCACG  
ATTCTGCATGGTCTGCAGTTGTGGACAGTTCTTCCCGACAAAGACCGCGAAGGACCACGC

CGCTTTGATCACTACGCTCCAGAAGAAATCACACTCGAAGGCGGAAGTGCACGCGTTTTTC  
CTAGGTTGCTATTTGGTCAAACCTCCCCGTGTTTCATACGTTTACTGGCTCTTCCTGTTTT  
AGAGTGCAT

>RXA02367-downstream  
TGATCTTATGGACCAACTGCCCT

>RXA02368-upstream  
CTTAGGTCAAGCTTGCATTTATTGGCTAGTGTGCGAAATCATGGGAGATTTAGCAAAGCA  
CATGGGCAGTGAACCACCAGCATGGTGGAAGTTTTTACCG

>RXA02368  
ATGATTGTCTCGCTGGAGCCACTCGAGTTACCTATGAAGTAGAACCTTGGCTGGCGATC  
CCATTATTCATTTTGGCTTTTGCATCGATATTGATCCCATTTCCGATCTCTAAGACAAAA  
GGACTCCCGTGATATCGATGCCTGGAAAATCCACACCACGCAAGGCGATAAAAAGCGTGCC  
ATCCGCCAACTGATCATTCGGGCTACGGCTTTGGCCATCGACATCATTTGGGCTGCCGACA  
TTATTTAATGCCCCCTCCCCCTTGCTTCCGCTGCACTTTTGGCGGTGTTTACGGCGCTTCC  
CTAGCTTGGGCTGCGTACAGAGCTGATCAGCTTCCACGCATTTCGAACGAAGGAACGCCTC  
GCAGAACTTTTACAAAATGCATCTCTGGATGATGTGCGCTCAGATGACTTAGATGTTCTA  
GAGCAGCCGGAATCCCGTGAATTAGTGCGCTGTCTGCTTGCCACGGTGCGATGGATGGC  
ACTCGGGTGATGGCCAGACAGGTGCGCGAGTACTGGATACCGAGGTAGACGAAGTACAT  
CAGGTAGCACGCTCACTAGAACAGCATGGTTTTGGTTAGTCGCTCCACCATCATGCCGGGT  
GGGGATCCAGGAAAAGTATTCATCGAAGTTTCCCTGAAAGGGATCTCAGCCATCAAGGCA  
CTTGAATCCGGACGC

>RXA02368-downstream  
TAAGTTGTTGATACATCAACTTA

>RXA02374-upstream  
ACCCACAACAGACATATTTTCTCCTTGATGCGCACCAAAATGCGCCTTAGGTTGAGATGA  
ATTGGATAGCCCACCGTACGCCTATCTACACTGAATTACC

>RXA02374  
ATGAGCTATGACTTTTGTCTCTTTGAAACCGATGGCGACCCAGGTAGCGCCCGTATTTCC  
AAAACCCCACTGACCGAACGCATCGATTTTCGCCACGCCATCTACAACCCCTGTGTGGAA  
TCTCTTTTCGGCAGGGCTTGCCGAAACGGTGCCAGACACCGTCAAGCTTGAAGAAGACGCC  
ATCCACTTATCCGGTGATCGTTGCCTTTACGTTGTGACCAACTACAACCTCCGCCGAAGAA  
GCAGCCGAATGGCTCACCGCCATCGCTTTTCGATTACGGACTGGGCCTTGCCGACATGAAC  
GCGGACACCATCCTGCTTTTTCGGCGATGAAGATTCCGACGCTGTGCTCCAAATCGATGAC  
TGGTTCTCCCCCGCTTTCTCTGCGTACGGCCTTCCCCACCTCCTGGTGGAAGTCATGCGC  
CTGAAGGATTCCAAAACCCCTTATCTTCGAGTCACACTTGCTGCAGATGACTCGAAATTT  
ATCCAAACCCCTTTACGAAACCGACAACAAACAAATGGTTGGTGGAACCTCTTCCTCCACA  
GGCACGGACGAAACCCACGTGAAGACCATTAATGATGTGCTGGAACGCATCGAGACATGG  
TTCAACCAGGAGACTGCTGTC

>RXA02374-downstream  
TAAACCTTTTGTGCTGTTCTGGG

>RXA02381-upstream  
AAGTTTGAAGAAGTAATCAAGCTCCCCGTGTGAGGACTCGTTGTAGTCTTTTATTTAGTTA  
ATAAAAGATTTTCATACCAACTTGTGACGAGGGGAGCTTTC

>RXA02381  
ATGTCGTGTCAAACTTCCGTCGGTTTCTTGCTGGCATAGCGGTCATCGCGCGTGTTGTT  
GCTGCGACTCCAACAGCTCAGGCACAAAGCAGTGGCTCTTCTGGATCCTCTGGTTCTTCA  
GCGGGATCTAGCGGGCTGTGGGATTTACTTTTTCCAGAATCCCATGAGTCTTTTATCGAG  
CGGCTTCTTGATCCTTTGGATGACAGCCATATATCTATTACCCCTGACCTCACCCAGAC  
CTGTATGAAGAGGTGTTTGATCCACCGCAAATTGGTGAATGCCCAGCCGTTGTGCTGTG

GTCGCACGAGGCAGTGAACAAAACCTTCAAATCCGACCCGCGGATACAGCGAGGAATCT  
CCATGGACATCCAATGGATTTGAGGAAAAAACTTTCGTAGTTTCTTTGGCCGAATGGAA  
AAACACTACCGTGAATCGACTGGCGAGTCGTTGATGAAAGACGTCTACGTGATGGGTCTG  
AATAATATCGAATACCCCTGCTTCTTTGCCACTGTCTTCGGAGGGAAGCAGCGCCATTGAA  
TTGGGCACCTTCCATTTCTAGTGGTCGCGACAATGTCATCAGCGCGATTGATCGCTTTGAA  
TCAGCGACAGGGTGCACGCCGAAGTACCTGTTGGCGGGTTATCTCAAGGTGTCTTCATC  
GTTGATGGCTATGAAGAGGAGTTGATTGCGAGGGATCAGTACCTCGGCACCTTGCACATC  
GCGAATCCAGCGCAACAAGTTGATGATCCAACACTTGTGGGCATGAAGTAACCACGGGA  
GGCTTGGCTAGTTCCTGAGCCCGTCGAGGACAATCCTTTCAAGGTGAGCTACTGCCTG  
CCTGGAGACATCGTGTGCGATCGTTCTTTGAACAGTTCTCTGCTGCGGGATCCTCTATA  
GCAGCTGCGCAATTGAGCACCGGAAATATCCGTCCAGGTGAGTACACGTGCAATACTTC  
GTTACCACCCAACCGTGGGATGAGCAGATTTTTGACGAAGTCGCATCGTGGATTGAAGCT  
GCC

>RXA02381-downstream  
TAAAAACTCGCGAGGACGCATGC

>RXA02383-upstream  
GGGCAACAATGTGGAAAAACGCCAGTGGTATCTTGACGGCTGGAACATGGGTGTTACGCA  
GTAAAGAAGATGGCAATAAAAATGTGGAGGAGTAAAGGCG

>RXA02383  
ATGCCAGTTCGGGTAATTGTTGATTCTCCGCATGCTTGCCAACGCATGTGGCCGAGGAC  
CTCGACATCACGGTGATTAACCTGCACGTGATGAATAACGGTGAAGAACGCAGTACATCC  
GGGTTGTCTGTCGTTGGAACCTGCAGCAAGTTACGCCCCGCCAGCTTGAACGCGGTGGCGAT  
GACGGTGTGCTTGCGCTGCATATTTCTAAAGAGCTCTCGTCCACGTGGTCCGCAGCGGTG  
ACAGCAGCCGCTGTGTTGATGATGATTCTGTGCGCGTGGTGGATACCAAGTTCGCTCGGT  
ATGGCTGTGGGTGCTGCCGCGATGGCTGCTGCCCGCATGGCTAAAGATGGCGCGTCTTTG  
CAGGAATGCTACGACATCGCGGTGGATACCTTGAAGCGTTCAGAAACCTGGATCTACCTG  
CACCGCATTTGATGAAATCTGGAAGTCGGGACGGATTTCCTACTGCAACCGCCATGGTGTCA  
ACGGCTCTGGCAACCCGCCCATCATGCGTTTTCAACGGTGGTTCGCATGGAGATCGCCGCT  
AAGACCCGCACCCAATCTAAAGCGTTTGCCAAATTGGTGGAAATTAGCCAGATCAGGGCA  
GAT

>RXA02387-upstream  
GCTAGCCCCGATTCGCTTCAGGTACACACCTTGAAGGCCAGCGAAATTACTCAGGGTGAA  
TTGTTGGATGCGTTAAGCCCATCCTTGTTTGTCTGAAGACC

>RXA02387  
GTGTGGTGGTGCTTACCAACATGGATCAAAGCAGGCCAAGATGCTGTAGATCTAGCCTTA  
TCGCGACAGTGTGATCCCAGCCCTGGTACCTACTTGATCGTCATGCACTCTGGCGGTGGA  
CGCTCTAAGTCGATGGTGAAGAAGCTGGAAAAAAGTCGCGGTGGTGCACGATGCCGCAAAG  
CTGAAAGACCGGGATCGTCCAGGTTGGGTAAAAACAAGAGTTCAAAAACCACAAAGTCCAG  
GTCACCCAGATGTCATTCATGCTCTTTTAGAGGGCGTGGGTTTCAATCTAGAGAGCTG  
GCGTCCGCGTATCCCAATTGGTTGAGGACACCCAAGGCAACGTGACGGTGGAAAAAGTC  
CGTGCCCTATTACGTGGGTGTTGCTGAGGTATCGGGTTTCGACATCGCCGATTCTGCATGC  
GCCGGTCAAATGTCAAAGGCCGTGGCCAGCACCAGACGTGCCCTTCAATTGGGTACCAGC  
CCGGTTGCATTGGCAGCTGCGTTGAGTATGAAAGTTGGCCAGATCGCCAGGCTGTATTCC  
ACCAGGGGACGCATCAACGGTTTTGAGCTGGCCAAAGAATTGGGCATGCCGCCGTTCTGTG  
GTGGAGAAGACTGCGAAAGTGGCCCCGAACTGGTTCGGGAGATGCGGTTCAGCGAGGCCGCTG  
ATTTTGATGGCCGATCTG

>RXA02390-upstream  
GCTGGTGGTGTGACCCATACGCTGGAACCTCAACTGCTGTTGATACCGCCAAGATGTTT  
GGCCGCGAGGATCTCGTAGCTCGCTTCGAGTCATAGGCCG

>RXA02390  
GTGGAGTGGACCGCTTTTGGCACCTGATTCTGCTCAATTTGGTGGGCAGTTTATCCCCG

GGGCCTGATACCTTTTTCCTCCTCCGCTTAGCCACCCGCTCCAGAGCGCACGCGATCGCT  
GGCGTCGCCCGGCATCGTCACCGGACTCACGGTGTGGGTGACGCTGACGGTCGTGGGAGCA  
GCGGCGCTGCTCACCACCTTATCCGTCGATTCTCGGAATCATCCAGCTCGTCGGCGGCACG  
TACCTAAGCTTCATTGGGTACAAGTTGCTGCGCTCGGCGTCGAGAGAGCTTATCGACGCC  
CGCCAGTTCCGTTTCAACGCCGATGCCCGACCTATCCCGGATGCGGTAGAAGCACTGGGA  
ACCCGCACTCAGGTATATCGACAAGGTTTGGCCACCAACCTGTCAAACCCCTAAAGTTGTC  
ATGTACTTCGCGGCAATTCTGGCTCCGTTGATGCCAGCGCACCCATCACCGGTGCTGGCG  
TTCTCTATCATCGTGGCGATTTTAGTGCAGACCTTTGTTACCTTCTCTGCTGTGTGCCCTC  
ATTGTCTCTACGGAGCGTGTGCGCAAAGCAATGCTGCGTGCAGGTCCCTGGTTTGACCTG  
CTTGCTGGCGTTGTCTTCCTCGTTGTGGGTGTGACTCTGCTGTATGAAGGCCTGACCGGT  
TTACTCGGG

>RXA02390-downstream  
TAAAGGCATAAAAAATGGCTTCC

>RXA02393-upstream  
GCCACCTTCATTTTCNCANGCCNCGCAAATCAGAACNCNACCTTCTGGCACTCCCNGC  
TCAAATNNGGGACGTCCATGCNGANGTTTTAGACATCTTC

>RXA02393  
ATGGCGGAATCTTTAGTGATTATCAACATCGACGAGAAAAGCGCCAAGCTGCTTATCGAC  
GCCGCCCCGCCACCACATCCCCACCCGCTTACCGGGCCCAACGCCCGGCCGCTCAGCGTC  
ATCCCCATCGAGGATCCCCGCTCACGCCCCGACGCTCCACCCAGATCATGGTTGGATGATG  
CCGCTAAGCCCCACCAAGTGGTGGATGAACTGCTTGGCGGTGGCTTGAAAATTGGAGAAACA  
GAACTAGAAAAGCACCAACATTGCGTTTATTGTTGATGCTTCC

>RXA02393-downstream  
TAAAAATCCTGTGCCGTGAGGTT

>RXA02395  
CTCATCACCATGGCTATCCCCCTCCTTCATTTTGATCCTGGCGTTCACCATTTTCGGTGGA  
ACTGCCATCACGATGAACCGCGAGAACGTAGATGGTTTGTACGGCAGTTCATCCAAGGAA  
CAGGTGCTGTTTGATATGTTTACGCAACCTTCCGCTGTACTCGATCACACCGTTCATTTTG  
ATCTTTGTGCTGGCAGTATTCTTTGTTACCTCTGCCGATTCCGCCCTCCGTGGTGATGGGA  
ACGATGAGCTCCCAAGGTAACCCCTGCACCAACAAATTAATCGTGGTGTTCTGGGGACTG  
TGCATGATGGGCATCGCGGTGGTCATGCTGCTTACTGGTGGCGAATCCGCGCTGACTGGT  
CTGCAGAACCTCACCATTTTGATCGCCATTCCGTTTGGCGTGGTGTGATCGTGATGGCT  
ATTGCCTTTATTAAGGACTTATCCACAGACCCAGCCGCTATTTCGACAACGCTATGCAAAG  
GCAGCCATCTCTAACGCGGTGGTTTCGTGGCTTGGAAGAACACGGCGACGACTTCGAGCTC  
TCCATCGAACCTGCAGAGGAAGGTGCTGGAGCGGGTGCTACCTTCGATTCCACCGCTGAT  
CACATCACCGACTGGTATCAGCGCACCGACGAAGAAGGCAATGATGTTGATTATGACTTC  
ACCACCGCAAATGGGCCGATGGTTGGACACCGGAATCGACCGAAGAAGGCGAAGTGGAC  
GCGAAAAAGGAT

>RXA02395-downstream  
TAAAAAATAACGACTGGCTGGGA

>RXA02396-upstream  
GAGTGCTTGTAGGTTGATAGAAAGTAAACTAAAGTAAACATCAGGTAAACAGCCGGGGGT  
TCAAGTATTAACCTCCCTCGGAAACAGAAAGGAACACGACA

>RXA02396  
ATGGCTACCACAGCTTCCAAGATCTCCACGATCCGTCCAGCACAGCAAGATGCTCTTTGG  
AGCGTACGTGAGGATCTTACGCTCGCTTCGATGGCCTGGTCGATCCTGTCCAGGTAGAC  
GCAATTTTGGACCATGTGCGATCTAACCGCGAAGCCAAGATCACCGTCTTCAGCAAGATT  
TTCATCGCTCGCGAGGCAACCGCTGCACTTCAGCAGATTGCTGGCAACGTTAACGCAGAC  
CTGCTTGACTTCATTGCCCTCAACCGTGGCATGGCAGCA



>RXA02396-downstream  
TAAGTTTTAGCTGCCCATAAATT

>RXA02398-upstream  
GTGTCCAATGAATGCGTTCAATAAATGCCCTCTTTAAGCATATTCTCTGAGTGCATTTCAT  
TACAGGCGTTAATTAAATGCGTTCATAGAAGAACTTGAAA

>RXA02398  
GTGGTTGAAGTGAAGAAGCGTAATCTCCTCGTAGCTCCCCCTCACTGCTTCCCTGGTGTTC  
TGTAACCTTGGCTGTTGCAGCAAACGCCGTTGAAGTTGAGGCCGAATCACCAGTTGTCATC  
AATGAAGTTGAATCCAACAGCGACCCAGTTGGTGACTGGGTGGAGTTGGCTAACACCGAC  
AACAACAACCTCCATCGACATTTCCGGTTGGTCTTAGTCGATGACAAGGAAGACCTGGAA  
AATGCCCTCGTCTTCTTGAAGGCACTGAGATTGAGTCCGGTGGATACTTTGTTATCTAC  
ACCGACTCTGCTGATTACGTGCCTACCAACAACACCTTTGGTGGCCAGGAATACCTCGGC  
CTCGGCAAAGATGACACTGTACTCTGCGCAACGCTGAAGGCGAAGTAGTTGCTACCTAT  
TCCTGGAAGGATCTGGGCGAGCACGCAGAAAACACCTATGGTTCGCATCCCAGATATGACT  
GGTGATTTTCGAAACACCGGCGTTCCAACCCCAGGTGCAAAGAATGTTGCTGCTGAAGGC  
TCCGGCGAAGAAGAAGGCGTTGTTGCAAACGCCAGCTTCCATTCCACAACGTTGAAATC  
ACCCCAATTACCTCGGTGGAGATTTACCGGTGAAGATATGTCCGGCGTTGATTTTCGAT  
GCAAAACAGCACCCGATGGATCGCCAACAATGACATTGGAAGATCTACTCCCTCGCCAC  
GACATAGCTAACAACACCTACAAGCTGACTGGCGAATGGGAAACCGGCTACCCAGAAGGC  
GGCGGAGAGCCAGACGCTGAAGGCATCGTCGACGCTACCAACGGTGACATCTACCTGTCC  
ACCGAGCGCAACAACGCTGACAAGAAGCTCTCTCGCCCATCCATCCTGCGTTTTGCTACC  
CCAACCTGGCAAGACTGGCGTACAAAACGCAGTTTCAGGAATGGGACCTGTCTGAGTTCGTC  
GGCGACATTCAGCCCCAATGGTGGTCTTGAGGCAATCGCGCAGCTCGAGGACAACATCTTC  
GTTGTTCGGTGTGCAAGAGACAGGTGATGTCATCGTTGTTGATCTTCCGCTGACCAGCCA  
GTTCTTGGTTCAAAGGTACGAATCTTCTTCGACGGTGTCATGTCGCTTGATTACAACGCA  
GCAACCAAGCAGCTCAGCGTTGTGTGCGACGAAGCATGTGACGGCTGTCTGAAATCCTC  
GAATGGGATGGCGAGAAGCTGTACAAGTCCGACGACAAGATCTACGAGCGTCCAGCAAAC  
CTGGGCAACTGGGCTAACGAAGGCTTCGGCACCTACACCTCAGAGCTTAAATGCGAGAAC  
GGCAACACCGTTTCTGTACCAGCTACCTCTGGGCTGACGATGCAGCAACCAACGAAGGC  
ACCTCCCTCAACTCCGCACAGGTTCATCAACGGAGATTGCGGCGACGTCAACATCCCTGGA  
GAGTCTCTTCCGACAAATCTCTCTGACTTTTGCAACCGGCAGCATCGCAGGCGCCTTT  
GCAACCGCAGTGCTCGCAGTCGTAGGCATT

>RXA02403-upstream  
GCACAGAATTAAATCGCTGGTGTGCGAACTTTTCATACCTTAACGCAGTAGTGATGCTTAA  
GGCACAACGTGGGGGCAATTCGGGCTATACTTTGGAAGT

>RXA02403  
ATGACTACTTTTATTACCTCCGGTGGCTTGGAATCTCCCCGCTGGCGCTCATATTGTT  
CACGCCGAATCACCTGAAGGTGAGCTGTTGTTTGTAGCTCCGCTTCCCAATATGGGGAG  
GGAAATGCAATTAGGGGTGGTGTGCCCATCATTGCTCCATGGTTGGTGGACTGCTTGGT  
TTGGACCCTGCACATGGTTGGGCGAAGCGTTCCGCGTGGGACGTGACTGAACATGACGGC  
CAAATTCACGCTGAATATGGCCGCGATGGTTTACTGCTGGATATTTCGTGCGAACAGCACT  
AAGAATGGTTTTGAGATCACCTGCGCGCTTACAACGACACCGATGAGGCACGCACTGTG  
CAGTTGGCCTTCCACCCCTATTTCAAGGTGGATGATGTAGAAAAGATCGAGGTCCGTGGC  
CTTGATGGGGTGGACATTTCTCAATCGCCTGAACAATGAGGTGGAGACCCAAGATGGTCCC  
GTTACTTTTGTATGGCGAGTTTCGATCGCATTTGCGCTAGGGACTCCGGTTGTGAGGATTTT  
GATACCGATCGCATCATCACCATTGAGGGCGATGGTTCATGATTCCTACTGTGGTGTGGAAT  
CCAGGCGAAAGTCGCGCCTCCACCGTGGCCGATATTGGCGAAGGTGAATGGCGCGACTTT  
GTGTGTGTTGAACCGGCGCTTTTGGGTGCTGACCAAAAAGGAGTGAGGTTGGCTCCGGGG  
CAGTCAGTCACCGTTGGGATGCAGGTAAGCGTCGAAAAGCGTGCT

>RXA02403-downstream  
TAGTTTTTTGCTTTGAACCTCGCG

>RXA02406-upstream  
CACTCTGATAGCCTTTTCTCTGAAATTGTACCGAGCATTTGATTTTGTTCCTTATCAAT

GCTGGTTTTGGTGACAAAACTCGGCGGAAGGACCACCGA

>RXA02406

ATGGAAACCCTTGCAGCACAAGCGCGCACCTTGCTAGAAAAATGGGGCGTCGCGCCGACG  
CACGCATCTTTCGTCGAATCCATTGCAAAGGCCATCCCGATTCTGTGTCGATCCTGCTGACG  
CTGATTGTCCACCGTGAATGGAATTTCAAGCGGAAATCCGGTCCAGCCACCAGCACTGGAA  
CAGGTACGGACCGATGTAGTGAACAAGATCAACTACGAACGCAACCTAAAGGGCCTCGTC  
TCGATCAGCCCGGAGCTTGAATTACACACGGCAGCCCAAACAATTGCGCAGCGAAATGCA  
GACTCAGATTCCGAAGAAAAAGTACCGGATCCAGAGGGAACCTTGGTGGTTCTGCAACAG  
AATCTGCCCTATGCAAATGCCAACGCCGATACCATCGTTGATCGGTTCTTAAACTCTCTT  
GATCATGTCAAACACTGCTTGCACGATTATGAAGCCATCGGAGTTGGTGTGGCCTAC  
AAGGGTGATCATGCGTGGATAGTGGTGGAGTTCAGTGTAGCTCCCGCTGATTCCGTAGAA  
TCAACAGAG

>RXA02406-downstream

TGAATACCAATCCGTCTGAATTC

>RXA02407-upstream

GGATAAAAAATTTGGATGACATATCACCTAAGCTTGCAATTTCTACTGGAATAGCGCGACT  
ACTCTGCACCAACGCATAGTTGTTGACTAGGCTATTTGTC

>RXA02407

ATGAATAGGCAAAACCAACTTCACTACCCGCAGGAAGTGAAGGCAGTGGAAAGTGTGGAA  
TCAAGCTTGAACATGTCGTCACCTTCTGCACCGCTTGCCACGCCAGATGTTGAGCTTGAT  
GTGCACACGTTGTGCGAGCGAAAACCTGCCTTGGTTGTGCATCGTGTGGGATGATCCGGTC  
AATTTGATGAGCTATGTACCTACGTTTTCAGACTGTGTTGGGCTTCAGTAAGAAGAGG  
GCCACTGAGCTGATGATGCAGGTGCACACCGAAGGTAAAGCCGTGGTGAGTTCTGGCGAG  
AAGGAC

>RXA02408-upstream

GTGATGTACGCGGCGGGGAAGCCGCCGAGGAAGACCGCGAAAACCTCGTGCAGTGGCTTG  
CCTACAATCAAGAGTCCTTGCTGGAAGCGATGATGAATTA

>RXA02408

ATGCTTATCGACGTCGCGGGCTTCCTTTTAGGCCACGTCACGAAGGGGGATACGGGTGTC  
TCAGTGGTCATTGCACCTAACGGTGCATTTGCGGGCGTCGATGTCCGTGGGGGAGGCCCCA  
GGCACCAGGGAAACCGACCTTCTAGAACCACACAATTCTGTGCAGCAAGCACATGCCGTG  
GTGTTGTGTGGCGGTTTCGGCGTTTCGGGTGGCTGCTGCCGATGGAGTGATGACAGCCCTA  
GAAAACCGCGGTATTGGTTTCCCTGTCCGTCCCGAAGGGCCTATCGTGCCAATCGTTCCA  
GGCGCTGTGATTTTGTATTTGTTGGTGGGCGATCCCAAAAACAGGCCCACGGCAGCTGAT  
GGGGAACAAGCAGTTGAAAACGCTTTCGCTGGTACACACAACGGTTTCGGGCAGCGTCGGT  
GCAGGAACGGGTGCTACAGCAGGTTCGGCTGCGTGGCGGTTTGGCCAAAGCTCGCGCCGG  
GTCGGAAAGTACACCATCGCGGCAGGGTTCGTGGCGAATCCTGTTGGGGGAAGTCGTGGAC  
CTAACAACCTGGAGCTTTGTTTGGTAGGCCCGAAGTGATGGGGGTGGGCGTCGATAAGCTA  
AAAAGCGCGGCAGAGACGCTGAACACGACCATCGGCGTCGTGGCAACTGACGCGCCGGTG  
ACAAAAGCCCCAAGCGAAGCGCTTGGCGCTGGTGGCCCATGATGGTTTGGCGAGGGCAGTG  
CGGCCGTGCGATTACCGATGGACGGTGACACATTTTTCGCCATGTCATCGGGTGATGGT  
AGTGGCGTTACCCCGGTTGAGCTGGGGGAATTGTGCGGCTCATGCTGCA

>RXA02409

CGTGACAGTCTGTGCCGAAGGATCCTCTGGCAGAGATGACCGCATGACAAGTGGACAC  
AAAGAAGCACCAACCGATCCGGCGCTTGCGCGTTTGCTCCCTGATTTTCAGCACGAGGGC  
GATGAGGAATACGACGGCGATAATTCTTTCCCTCCGTTCACTCCATGAAGGCGACATCACC  
CGAGCAAACTGGAAAATCTGCGCGTGATTAACGATGCGCTGGGACCCGACGGAAATGTT  
GCGGTCACCGCCTCTGAGGAGGAAGCGCACGCTTGGTTGGCTGCGCTCAATGACATCCGC  
CTGTACGTTGCTCCGGTGATGTACGCGGCGGGGAAGCCGCCGAGGAAGACCGCGAAAAC  
CTCGTGAGTGGCTTGCTTACAATCAAGAGTCCTTGCTGGAAGCGATGATGAAT

>RXA02409-downstream  
TAATGCTTATCGACGTCGCGGGC

>RXA02412-upstream  
TGCGGTGCGAGCAACTTCGGAGACTATTGGCTCTCCTACAGCTGTGGCATCCGCGAAACG  
TTCACCCAAAGGCAGTCTCATTTGGGTTGATCTTGATCTTG

>RXA02412  
GTGGCCATCATCGTGATTGCGTTTGTCTTGTGTGTTCAACAGCCTCGTTGCACCAAATAAT  
TCCTCGAGCCCTGTGGCAAGTCCAAGCACCTCTGAATCTGTGGAGCAAACATTTTCGGAA  
TCCCCTGAGTCACCGAGCGCGACAGAGGATCAGCCCCCAAGCAGTGCAACGGAAACTCCC  
CGAAACCGCCCTGCGCAACCATCACTTCCTGCGGGAGCATCACCAGCCAATGATGCTGCT  
GCCACCCAGACCGATGCCGGCAATTTAAACAATGTGTACACCGGGTCAGCGTCCACCTCA  
GCAGGTTTTGCTCAAGCCGTCCGAGATGCTTTTGTAAACCACTATTTAGACACCAATGAA  
CTATCCGGCAGGGTGACAGCCACCAGCCCTGTCACTGGCGGAAACTACACCATGAAGTGC  
GAAGACAACGGCGAGTACGTACCTGCACAGGTGGCAACAACGCCGTTGTCTACATTTCT

>RXA02412-downstream  
TAAAACTTCTAACTACACCGGG

>RXA02417-upstream  
CGCTGTTTCAGAGGACTTCGCGGGGGTTCGACAGTATAACGAATTAGCGTCACTAGAATAA  
TCGGGCTGTTTAGTTCTTCACACCAACATAATCTTATGTA

>RXA02417  
ATGGACATGAACCTCTTCTGACCGATTGGCTCTACGCACCGCGTTAGAGAAATTGTCGGCA  
TCGGCTACCGCCATGGCGTCAGCGAGCAATGACATCAAAGATCTCGTTGCACGCCTTGAT  
GCCCCAAGAGATGTCGCTTATCGACGCAAACCCGGCTCCCACCCAGCGCCCACTGCCCCA  
CCCCGAGGCTCAGCTTGAGCCCCAACCACTGGTGTATGCAACCGCCTCAACGGCGCCTGCA  
CTGGCGGATGTTTCCGGGACCAACCGTATTCCACGTTTCGTTCCGGCATCGCGCCCTGGAT  
CCAGCGAGCGAAGGCTGGCCACTTGGCGTCGAGAAGCAAAAAGTGCAGGCTCCTGCGTAC  
CCGCACCCCGTCCGGCCAGCTCGTCCGGCAAAGCCGCGCATGACGTCGGAGGAAAAGATC  
ATGCGTGGCGTGCGGATCGGCGGTGGTGTGATCACCGTGGCGCGGTGATTTTGTCTGGTG  
TCGGTGGCGATTCAACGCGGTGGCTTGGTCCGCTGGGTGCGTGTGATTGGTGCGTACCTG  
CTGGCGGTGCTGCTTCTTGGCGCCGCACATTATGTGCGCAAGCGCGGAACCCGTGTGGAA  
GCACTCGTTGCGTTGACGGTTACCTCCCAGATTGCGTTTCTTGCCACAACGAGTGCAATC  
ATCTTCATTTTGGAAATGGTGGCCGCTGGATTGGGCTCGCTGGTGGCATTAAATAGGCAAT  
ATTGGGTTCTTAATCGTTGGTTCGATTGTGGAGCCTATCCAAAACCGAGAAGTCCGCGGCC  
GAAGGCCACACAGTATTTGTGGGAGCCATCGCCGTTTCAGGATTCTCCGCGATACTCTTC  
GCGCTCTCCGCCGATGCCTGGTGGCCAATTTCTCCATTGTTGCGGCATTGTTGCTGTGCG  
TACCGCTATCTCCACGAATATCATCCGAGCGAGCATGGCGGCATTTCGCGGTCACTTCTGCA  
TTTGTTTTGTTCGGCATCCTGGCAAACCATGGAATGGCCAGCAACAATCGTTCGGCACAATT  
ACTGCAGTCCCTACTCGTAGCCTTGACATTGTGGGATCCGTTTAAGATCACCGCCACCGAC  
AGCCACGACATCGCGTTGGAGGAATACTGGCGCAGCTTTGAAACCAACCCTGTTTCCACG  
TGGGTGGGTGCTGTTTCTCCGGTGCTCATCGTGTTCATCACCACCAGCATGTTTATTGCA  
GTGCACTGGCCATGGCTTGCCCTGATACCAGCGTGTGCGGTGGCAGCTCTCGGAATTTTC  
GCGCTGCGCTCATCAGACACCGCGTCCATTGAAAATCAACGCATGTCTCGCCTCATTGCT  
GTTGTTGGCCTTGCGTTGATTGCTGAAACTTTTGTCCAGCTGTTCTACGGCGATCTCCCC  
ACCAACCCGCTTCTCGTCATGGTGTTCCTCATCGCCGGAGCTGCACTATTTATGTGGTTG  
CGGATGCTTCCACCGCAGCGTCAATTAGGTGTCGTCCCATGGGTGCTTGGCTGATTGCC  
GCCGTGCGATGACCGCGTGTGCTACGCGCAATGTGCTTTCAATTTCTCCACTGTGGCTC  
ACCGATACCCAAGCGCTCATCCAAGCATTGCTGATCTTGGTGTTCATTGCCGCCACAATC  
CAAGTCCGCGCAGCTTCTACGGACACAACTGTGGCTGCAAAATTTTGGTGGCTTGACG  
CTTCTCAGCTGTCCGCAATTTCCATCGTGACCATCACAACCTTCATCGGTGCGCTCATC  
GCAGGAAATGCCGGCATGATGCTCGGATTCTCATCGGCCACGCCACGGTTTCTATCCTG  
TGGATGGTCATCGCCGAGCACTGATGCTTAATAGGAAGCTTCTCGACGCGCCCCGGCGCC  
CTTTGGACCGGCGTTGGCTTGGCGGTGCGGGCACCTTCAAGCTGGTGTCTTTGACCTG  
GTCGCGCTGTCCGGAGTTCCCCGCGCAATTGCCTTCTGCTCTCCGGTATCGCACTGCTG  
ACAATCGCTGCTATGAGGGGCGGAGAACCTCAGAAAACAAGGCCGACGTAGCTAGACCT

CAGGTGGCTAGACATGGGGCGACTAGCCATAAAAAATGAGGAGCCTTCCCATGAAAGCCCC  
TCATCTTCTCCTACAACAACCTCTT

>RXA02417-downstream  
TAAGGAATTGGCCGGTGTAGGAA

>RXA02421-upstream  
CGGTGTACTTTAGCAACAAGGAAAAATAACTATCTACGGCCTGTTAATAGTTCAACCTAC  
AGGCCAAACCCGCCTTCATTAATGAATTGTGAGATCGACC

>RXA02421  
ATGACATTGCTCTTGAAGCCAATTTTGCAGGCTGCGGGAATCAATCCTGAAGATGCGTTA  
GCAATGCGTCATGTATTTATTTTCGATCCACGAGGACACCAATTCCAATGGTATTACCCGT  
GAATCTAAAGACGAAGAGATTCTCGCCTACACAGCTAGCCAGTCAAGTGATCCGCGTAGA  
TTCCCACTGAATCCGCCACGCTTTTGGATGGTGTTCATCCGAGAAGGTGGCTCGCAGGCT  
CGACTATGGAAAGTGGTGGAAAACACGGCGAAGTCACCAATGATGGCGTACGCAGAGTC  
TTCAACCTTACTGAGATTGAACTCATGGATGACCTTGCAGGCAGACTCGTTATTTCGTTGG  
AATTCACCAACGCAAGTGGTGGATTAAAGGGCACTACTGCTGCCCTATACACCGTGGATACT  
ATTGCCGATGCGGAGCCTATTCCGTTTCCAGGTTTCGACAATCTTGTCTGAGCTACCCA  
TTTCTTCAAGAAGTGATGCGTGAACCTGCCTATGCTTCGTGGCGCACAGCTCTTGGTGCT  
GTCAAAGGTATTTACCTCATTACCGATACCCGTAAGGCGCCACTATGTCGGCAAAGCT  
GAAGGACTAGAAAACATACGCCAACGCTGGAACAGCTACGCCACCAATGGACATGGCGGA  
AACGTAAAACTCAAACAGCTTAAGCCCGACACATTTTCGTTTTCGTTGCTTCGGGTCTTT  
GATCCCGCAACTCCAACCTAGCATTTAAGCGCTGCTGAAAGCCACTTTAAAATTGCTCTC  
GACACGATCAAGCACGGATTAAACGCAAAC

>RXA02421-downstream  
TAATCGCAGCTCCCCAACCCAA

>RXA02423-upstream  
TAGGTACGATCGGACGAGGAGAAAAATCTGAAAACAATCCAGTGGCCACCTCGGCTTA  
TAAAACTGGACAACAGTATTTTGATTGGAGCATCACCATA

>RXA02423  
ATGATCCGCAAACCTTGCTCGACCAATGCTTGCATCGGTCTACGTGCGAGATGGCGCAGAA  
ACAGTATTGAACACCAGCGCACACGTGCAAGGCACTCAGGTAGTTCTGGATCGTATCCGT  
TATGTGCTGCCCCGTAAGTACGCAAAGCGCATTTCCAGAGATCCAGAATTGGTCAACCCGC  
GTCATTGGCGGCACCAAAGTCTGTGCGGGTTCTTGT

>RXA02425  
CCCGGCGCCTTTTGATGAATTAACCAAGTGTTTGGGGAGAAAAAGGCGGAAGTTGGGCCGCT  
GTTATCGGCTTCTTCGGTGGCATCGCGCTGATCGCCATCATCGACCGCTTAGTCCCCACG  
GCGATTAAACCCACAGAGCCCTCCACCGTGGGAGGCGCCGTTGAAGGATTGAGCGCCGC  
AACCGCATGATGAAAATGGGTGTGCTCACTGCGCTGGCCATCGCGATCCACAACCTTCCC  
GAAGGTTTCGCTACATTCTTGGCCGGATTGTCCGATCCAATGATCGCGATCCCTGTGGCC  
GTGGCAATTGCCATTACAATATTCCAGAGGGCATTGCGGTGCCGGTGGCACTGAGGGAA  
GCTACAGGGTCACGTGAAAAGCATTAGGTTGGGCGACCCCTCTCCGGCCTTGCTGAGCCC  
GCCGGCGCCCTCATCGGATTCTGTGCTCATGCCCCTTATCGGACCAGAAGCACTCGGC  
CTGTGCTTCGCCGAGTTGCCGGCGTGATGGTGTTCATCAGCGTCGATGAACTACTGCCC  
ACTGCCATCTCCAGCGGCAACACCAACCGCCATCTACGGACTCATCGCTGGCATGGCA  
GTCATGGCGATCAGCCTGCTGCTGTTTATC

>RXA02425-downstream  
TAGCGTTCAGCCGAACAAGCAT

>RXA02427-upstream  
AGCGATGCTGACAGTGCTTCACTTCGGGCCGCATCTAATTCCTGCTCGATTACCCAACTG

CTCGCGCAGGGAATCGTCATCGACGACGAGGTGAACTAGC

>RXA02427

GTGGATTTTGTAGTTGGGTAAACGCTGCCCCGCGGAACCTGGCCTTACCTACGGTGAGTGC  
TGCTACCGCTTTTCACTCCGGCGAATGGGTGGCCCCACCGCTGAAGCGCTCATGCGATCT  
CGGTTACCGCCTTTTGTCTGTTGGAAATTCCCAGTACCTTCTTGACACTTGGGATCCAGAA  
ACCCGGCCAAGCGAAGCTCGGCCTCGATATGGGAATTGATTTCTACCGCCTCGACATCCTC  
GAGACCACCGGCGGTGGACCCTTCGATTCCACCGGCACCGTAAATTTCCAAGCCTTCTAC  
AAGGGGCTCGCCTCCGGCGTCCAAGAAGAAGACTCCACATTCGCAAGGTCAACGGGCGG  
TGGGTCTATTCCACAGGAGATGTCGAC

>RXA02427-downstream

TAGTTTCCCCACACGTGCAATAG

>RXA02428-upstream

CGAAAGATATGCATAAAGTGATGATGAAATAGCTTTGTGCGAAAGGTTTGCTCCCGGTGCA  
TTCAGTTAGCGTGAAGGTGCCATCATCACAAAGGGTTGATG

>RXA02428

ATGGCCGCGACGTTAGATCTTCCAGATACAGATCCCATTCGCTATGCAATGTTTGCCAC  
TGTTTACCGGCTCAGGTTTACGCCAGCCGCCGCGAGTCAGTAAAACACTCGCAGAA  
TCCGGCGTCCGCTGCCTGCGTTTCGATTTCAGGACTGAGCCAATCAGAAGGTGACTTC  
TCCAAAACACCTTCAACTCCAATGTGGACGATATCGTGGCGGCCTCGCAGTGGTTGACG  
GAACACTACTCCGCTCCACAGTTGCTCATTGGACACTCCTTGGGTGGTGCAGCATCACTG  
AAAGCTGCCACCAAATCTCCTGCCTCAAAGCAGTAGCAACGATAGGTGCACCTTTTGAT  
CCTGCGCACGCAGTCTGCACTTTGCTGATCGCATATGTGATGTAGATGATCAAGGTGCT  
GTCACCTCTGCAGCTCGGAGGCCGGGATGTCACCATTTCCCGCGAATTCCTCGAAGACCTT  
GCAGAGGTCAACCCGAAGATCACCTCCGCGAGGCTCCGCAAACCACTGCTTTTACTGCA  
TCCCCCACCAGCAAACCGTCCGGCGTGGACAACGCGCAGTCATCTTCAGAGTCACTCGC  
TACCTTAAATCCTTGATGACTTTGGACAAGGCAGATCACCTGCTCACCAGATGGCACC  
GCACAGCGTGCAGCCCGGATCATCGCGAAGTGGGTTCGAGCCCTACCTGGTTCCAGAAAAC  
GTCTGTGAGGATCTTCCGGAGTTTGTGCGCCGAAGCCTCAACCATCAAAGCCAGCAAATAC  
GGCGCAGCCATCCGCACCGGTGGTCACAATTTTCATCACCGACCGCGACAAATCCCAGGGT  
GGCAAAAACCTCGGCTTACCCCTACTTCCCTGCTGGTTTCCGCGCTTGCTGCTGCAAA  
TCTCAAACGATCAAACAAGCAGCCATCGACAACCGCATCAAAGGCCTTGACGATGTCAA  
GTGACGATCTCCAGGAACAATCAGCCGACCACGGCCAGATCAAATCCGCGGAAAGATC  
TCTTTGATCGGCAACCTCAGCGATGCTGACAGTGCTTCACTTCGGGCCGATCTAATTCC  
TGCTCGATTACCAACTGCTCGCGCAGGGAATCGTCATCGACGACGAGGTGAAC

>RXA02428-downstream

TAGCGTGGATTTTGTAGTTGGGTA

>RXA02430-upstream

CTTGTAGTCAAGCGTGGACCAAATGCAGGCGCTCGATTCCCTTCTGGACCAGCCAACCACG  
ACCGCTGGTTCGTACCCAGAAAGTGACATCTTCCTTGATG

>RXA02430

ATGTCACCCGTTTACGTCGCCACGCAGAGTTCCGCATCAATGAAGGTGAATTTGAAAGTC  
GTGGACGTAGGGTCCCTCAACGGAACCTACGTTAACCGCGAGCCACGCAACGCTCAGGTC  
ATGCAGACCGGTGATGAGATCCAGATTGGCAAGTTCCGCCTGGTTTTCCTCGCAGGCCCT  
GCTGAG

>RXA02430-downstream

TAAAAACACTTCCTAGGAAAGTT

>RXA02433-upstream

AGGCACGAGATCATCCATCGTCCGGTTCCATAGAATGGGTAGCTGTCGAATGCTGATAGAT  
ATTTGGTGACCAGAGATTAGAGCAAAGGATCATTTTCATC

>RXA02433

GTGAAGCTTTTCAAGGCAACCGCAGTTACTTTTACTGTTGCAGCAGCATTGGCGCTCAGC  
GCGTGCTCCAGCAGTGATGATTCCTCTTCGGAGTCAAGCACCTCTTCTCCACCTCTTCG  
GCTGCGTCTGATGCTGCGACTCAGTACCCAAGCTGCTGAGGAAGTGAAGACTGTTTCAGGGTTCTGAG  
GTGGCAACCGACCTGAGGCACCAATCGAGGAGAAGGTGAAGACTGTTTCAGGGTTCTGAG  
AACGCTCCTGAGCTGTTTGTAGACCATGACTCAGGCAAAGGTGGAGTCGGGTGCTGAGTTC  
CAGGTTGTTGGTTCTGTGCTTTCCTGGCTATGACCCAACCTCTGAGGTTCTGACCACCGTC  
ATGTTCCAGCTTCCGGACCGCGCTGAGCAGGAAGCTGAAGGCGTGGAGTTTGTGAACACT  
GATGGTAATTGGCAGCTGTCCAGGATTGGGCTTGTATCTTGATCACCATACTGTTGCT  
CCTGAGCAGGTTCTTGCAATGTGTGTTGGAAGTATGCTTCTTCCGCTGGTATTGAAGAG  
GCCCCAGCTGAAGAGGGTGTGTTGTTGAGGAAGCCCTGTTGAAGAGGTTCTTGTTCAG

>RXA02433-downstream

TAGGGTTTAACGGCTCAGGCTGA

>RXA02437-upstream

GCCCATCATAACTACATCGAGCGAAATGCCAACCATGTCCCATGCTTTTACTAATGTG  
GGGTCTTAGAAGAACGCGACCAATTTAAGGAGAGTTGAAT

>RXA02437

ATGAGCACGATTGGCAACCTCAAGTTAGTAGTGGATGGCGCACGTAAAGCTTATGGAAGT  
TATGCGGATTACCGCGACCGCAAGGTGTCTGAGACTTATGATGCGTTGTCCCAAGCTGCT  
GGTGAATATGCACCAAAAGCTGAGCAGGCTGTAGAGACTGCGCGGGAATCAGCGAAGGAA  
TTTTATACTGAGTCGCGCGATAAGGCTGGAAATGTCACCAAGGCTGCTCGTGCTCGTCTG  
GAAAAGGCGCTCGCTGAGGCTGACAAGCAGGGCACTTCTGCGTTGAAGGACGCACGTGAA  
TCGGGCAAGAAATTGAACCGGAAGGCGCGTCGAAAAGCAGACAAGGCCGCTAAGGCAGCC  
CGCAAGGCGACTGAAAAGAAGGAGTCGCACTGGGTGCGCAATCTGTGCTTGGCGGCGCTA  
GCGACCTCCGGCATCGTCGCGGTGGCCTACGCGTTTGAACAAGACCAAGAAGGAAACC  
CCAGGCACCCAGCTCCACGGGTTGAGGTTCAAGTGAAGAAGGCCGTGGAGCAGGATGAG  
CCTGAGGTTGTGGCTGAGGCTGCTGTGGAGGAGCCAGAGTTGGTGTACTCCACAGAAAGC  
CCAGAAACCACTGAAGCCCCAGCTGAGGCCACCGAAACTCCAGCAGAAACCACCGAAGAA  
GAAGCCAAAACCGAAGCTGAAGTAGAGGCAGAGCTCGAGGCTGAGGCCGATGCGGAGCAG  
GAAGCGGCAGAAGAGGCGGAAGCTGAGGCCATTCAAGGCTGAGTTTGATAAGAAGAATGCA  
CCTCAGCGCACCCAGAGCGAAAAGAAGAAG

>RXA02437-downstream

TAGGTTAACGCTTCAATTCGTGG

>RXA02443-upstream

CAAGCACTGCCGCGGGAGCCACTATCACTTTGTTAAGTGCTGCGATATTTTTTGCCACCT  
TATTGACAAAGAGTGCCATTAGTAGGTTAACTTCACCGC

>RXA02443

GTGATACTGAAAGACATTTTCAATAATGGGGAGCTCTTTGGGGCTTCCTCCGCGAAAAAT  
TTCCGAAAACCTACTAGCTGTTCCAGCCGTTGCCGCCTCACTAGCTTTTGGTATCACCGCC  
TGTTCCGCTGTAGATGACACCCCTGACATTGTGGTCACCACCAACATCCTGGGTGATGTT  
GTAAGCCATATCGTGGGAGATTCCGCAGATGTCCAAGTACTCATGAAACCAACGCAGAT  
CCACATTCTTCCGAGTCTCAGCACAAGACGCCGCTGCCATGGAACATGCCGATCTCATC  
GTGGCCAATGGACTAGGACTGAAGAGGGCCCTCAATCCAATGTGGACAATGCCAAAAGC  
CAAGGGGTTCCCGTCTTGGAAAGTCGGCGAACACATCGATGTCATTGACTACTCCCCCGGC  
GTTCCAGATCCTCACTTTTGGACAGACCCGCGCGCATGATCGCCGCCACGGAAGTTATA  
GAAGCTGAAGTATCAAGAAGTTCGATCCTTCCCTGACTGAATCGATCACACAATCAGCC  
CAGCACTACCGTGAGGAAGTTGTTGCCCTTGATGAGGAAGTCACCGAATTGCTCAGCGGC  
GTGGCCCCAGAAAACCGCAAGCTGGTAACCAATCAATGTTTTTGGATACCTGGCCAGC  
CGGTTTAACTACACCGTCATTGACACCATCATCCCAGGTGGAAGCACATTGGCGGCGCCT  
TCAGCATCTGACCTCAATGACATCTCCACCGCCATCGAAGACAACAATGTTCCCGCAATC  
TTCACCGATACCTCAAGCCCACAACGGTTAGCTGAAGTGTGGCCAGCAACGCTGGCATT  
GATGTTCAAGTGGTGTCCATTTTACGGAATCACTCACCGATGCAGATGGTGAAGCACCC

ACCTACATCAGCATGCAAAAAATCAATGCCGAGCGCATTGCAAGCACTTTGTCC

>RXA02443-downstream  
TAAACAGTCCTAAACAGTCTTAA

>RXA02444-upstream  
AAAATCAATGCCGAGCGCATTGCAAGCACTTTGTCTAAACAGTCCTAAACAGTCTTAA  
CAGTCCCCGTTTACTAAATGTTTTACTAAAAGGAGAACC

>RXA02444  
ATGAAAAAATCCAAGCTACTTCTTATTGCTGCGGTATCCACCGCATCTATCCTGCTGGCA  
AGCTGTGGCACTGACAGCTCTGCAGATACTGCAACTGCGTCTAGCTCTGCAACAGCAAGC  
TCCGAGGCACACGATCATGATGGCCACGAAGCCGAAGGCAGCAGCACTGCCGTTGAGGTG  
TCCTCCCCCGCAGGCCCGCATCGTCACCACCTACGACGGTGGCATCATTACCCTCGACGCC  
AACACTCTGGAAATCCTGGAAGACACCGAACTAGCAGGTTTAAACCGCCTCAACAGTGCA  
GGAGACGGACGCCACGTATTGTCTCCACAGGTGGCGGCTTCCAGCTCTTTGATACCGGC  
GCATGGACCGGAACACACGGCGATCACACCCACAGCTACACCGCCACCCAGAACTCACC  
GACATCACCTACTCCACCGATAAGCCTGGTCATGTAGTGAACCACGCCGGAAGACCGTG  
CTGTTCCGGCATGGTGACGGCAAAATCCAGATCTTCGACACCGCTTCCCTCCTCAAGGGC  
GATGAAGTAGAACCTGAGATCAAAAACGCCCTCAAAGCCCACCACGGCGTGGCAGTAGTC  
CTCGAAAACGGCGACCTGCTGCACACTTTGGGCGATGAGGATTCCCGCAACGGCGCCGTC  
GTATTCAACGCAGCCGGTGAAGAAATCGCCCGCAACGAACAGTGCCCCGGCGTTACGGT  
GAAAGCGCAGCACTCGGTGACGCCATCGCAGTTGGCTGTGAAGACGGTGTACTGATCTAC  
AAGGACGGCGAGTTACCAAGGTCCAGGCACCTGATTCTTACGGTCGCATCGGCAACCAA  
TCAGGCAGCGACGCTCTCTCTGTCGTCTCGGCGATTACAAGGTAGATAAAGACGCCGAC  
TTGGAGCGCCCCAGAGCGCGTTTCCCTCACCAACACCGAGACCGCGAGCTCACCTCGTT  
GACCTCGGCACCTCCTACTCCTTCCGCTCACTTGGCCGTGGCCCTGCAGGCGAAGCAGTA  
GTTCTAGGCACCGACGGCGCACTCCACATCATCGATGCCAACACCGGCGCCATCACCAAC  
ACCTACCCCGTCATCGATGCCTGGACCGAACCAGAAGTATGGCAAGAAGCACGCCCAACC  
CTGTTTCATCAACAAGGACCGCGCATACGTCTCCGACCCATCAAACAACGAACCTCATGTT  
GTTGACCTGGCCAACGGCAACATCCTTGCCAGCGCCACCTGCCAGGAACCCCCAACGAG  
CTCACCGGAGTGAGCGGC

>RXA02444-downstream  
TAAAAAGAAATTGCTTTTCGACG

>RXA02452-upstream  
TTTGCGCGACTAATCGCCGGATAAATGAATTGATTATTTTAGGCTCCCAGGGATTAAATC  
TAGGGTGGAATGCAGAAATATTTCTACGGAAGGTCCGTT

>RXA02452  
ATGACGCCTGCAGGTCCAGCACAACTACTCATTTGTTGCTCTTGTAGTAATTGTCTCTTT  
GGTTCCAATAAGTTGCCTGATGTTGCTCGGTCCGTTGGCCGTTTCGATGCGCATTTTCAA  
TCTGAGATCAAAGAGATGAACAAGGATCAGATCGAAAGCTCCGATCAGACCTTGAAGAAC

>RXA02452-downstream  
TAAGGTTCTTCGCATCTAAAAAC

>RXA02454  
ATGCATCTGCTCAACTTCTACTGGGGAGATGTGTCACTGTCTAATACTCTCTTTTCGTCGC  
GATGCTGAAACCTATTCCGCCTATCTCGTCGATGCCGAAACCGGGAGTTCCAGCCCCAAC  
CTCTCTGAATCACGCAGGCTTTACGACGTCGACATCGCCCGCGTCAACATCATTTGGCGAA  
CTCATGGACCTACAGGCGGGTGAATGCCAGATAAGTCCATCGATGTCATCGCCCTAGGA  
GGCCTTGTCGAAAGCTCTTATCTTGAATTGTGGACGGAGCTCACCGCGGAGGAATCCGTC  
GATGCCAGTGAATATTGGCGCCTCTCTGAGAGAATTGACCGGCTCAATCAACTGGGCTTT  
GACGTAGGGGAGCTCAAGGTCACGAAGGACGATTCCGCGCAGGTTGTGCGCATTCGCCCT  
GTAGTGGTGGATCCGGGCCACTATCGTGCAGAGCTATTGAGCTTAACCGGGCTGAGCGTC  
GAGGAACACCAGGCCAACGCCTATTGGGCTCGATCCAGGCCTATCAGGCCGTCGAATGC

GGACCGCATGTAGGTCTTACCCAAGCCGCGCATCTCTGGATGACGAATGAATACGAACCG  
ACTATCGCCGCGCTCCCGTGGAGATGTTAGACAAGCTGGAGCCAGCACAAATCTTCCAC  
GAAATCGTCGACACCGCTGGTTCTCGCCCAAGAAAGGGAGGGGCTGTCACCCTCCCA  
GAGGCCACGGCATCCTATCTTGAATCCGTGCTTCCGGCCCCGCGACGAGGCTCGCCTC  
CTCAGCACAAACCTTCAGACGAAGACTTGTCA

>RXA02454-downstream  
TAACCTCTCGCGTGCCCCAACGG

>RXA02457-upstream  
CTGTAAAGCCACGTGAGCTGTTGCTTAGACTTTACTCTACCCCCGCGTGTCCACCACATC  
AGTTAGAACATATGTACCACCTTCAAATCTAGGGGGAAACA

>RXA02457  
ATGTTCTACTTCACCGTCAATAATCCGCGAGGATCCTTTAAGCACCGAAATTGTTGAGACT  
AATCGCCGTGACCTCGCATTTTGGCATCGATTACGCCCCAAAGATGACGATGATTTAGCC  
ACAGCCATCAACAAAATATGCGTGCGCACAGGCTTATCCCGCAAACGATCGCCGCTTGT  
TTATTTAGCATCTGCTTCCTGCCGTACTTACCCAACCTCCACAAACCTCGTCGAAAAGCTT  
GGTCATCTCGACATGGCGCGCATCAACGCGATCACTAAAGCTGGCGAAAAAGTGCCAAGC  
GAGAAGAGAGAGCTTTTCGACGCGCTACCTCGTCGATTACCTGACGCGCTCGAGCGGAGGCT  
CAGTGCTTGGCCCCAGGCAAGCTCAATTTCCGCAATGATGCGGAAATTTATCGCACAAAC  
TGCCCCGACGACAAGGCTCCTCAGCCACCAATGATGGCTCCATCCGCTACCGCAGAAAC  
AACAAAGGCGGGATCAGTATCACCGTCGATGCCACCGCCAGCGAAGTAACAGAAATCAAA  
GCTGCCCTGGAACAAATGTCCAAAGATAAGGACTGCACACCAGGCACTTCCCTACTCCAC  
ATCATTGCTGGCCTGCCGACAAAAGTCGTACTCAACACCTACGGCACCAAGACAGCCCT  
GAATACTTAGAAGGAGGAACCTGGCTGTCAAAGGAACAGTCTGAGTTCTGGAAAACCCGA  
ACCACGTCCAGTCGGGATATGGACGCGCCCACTTCTCTTACACCACCGCCTACGCTCCA  
ACCCGAGAAATGCGCGCTACATCAAAGGTCTACGACCACTGTAGCGTCCCTGGCTGC  
AGTGTAGCGGTGCAAAACTGCCAACTGGACCACATCATCCCTGGGGTGAAGGAGGGCCG  
ACAACACCGTGGAATATTCATCCCTGTGTGTCTTCCACCACATCCAGAAGACTGAAGGG  
AGGCTCCAGTGCTATCCACTACCGGACGGCACCGTCTATTCCTAGTGGATGGAATACCG  
GTGTTCTCCATCCCCGACGGGCCTTTATCTAAATCGAATAAAACCTGGGGGACAAAGTTC  
GGCAAATACATGGAGCGTCGAATCGCCGCC

>RXA02457-downstream  
TAATCCAGCAAGCCAGCGTGATC

>RXA02459-upstream  
GGTGCGATCATTGGCCTCGCGGTTGATGGCGTTTCAAGGTTGAAGACATTAAGACCACTTCC  
AAAACCTTCCCTGGTTTTTGAAAATGTTTGGGAGGAGATGG

>RXA02459  
TTGGCTAGACGCAGCTATGACGAATCCGATGTTCTGTTGCGCCAGGTAAAGGTACCCGC  
CCTCGTACGAAGGATCGGCCATCGCATGAGAATGCTCTAGTGGGCATGGTTGTGACGAAG  
GATCGTGGTGCTTGGGGTGTTGTTCTCGATGGTTCGTCAGATGCCATTGTGACGATGCGT  
GCCCCGTGAGTTGGGGCGTACGGCTATCGAAGTGGGTGATCGTGTGCGAGTTGTGCGCGAT  
ACGTCTGGCCGTCCGGGCTCGTTGGCTCGAATTGTCCGCCCTGAGGAGCGCACGAGTGTG  
TTGCGTCGTACGGCTGATGACACGGACCCGTTTGAGCGGATTGTGGTGGCTAATGCGGAT  
CAGTTGTTGATGTTTCTGCTGTGCGCGATCCGCCGCTCGGGCGGGTTTTGTGGAGCGT  
GCTCTAATTGCTGCGTTTGTGTTGTAATTTGCAGCCGGTGTGTTGTTTACGAAGTCTGAT  
TTGGCGGATCCTGCGGAGTTGCTGCGGAGTTGAGGCTTTGGAAGTGCCGGTTGTTGTT  
TGTGGTGTGATGATCCTCTTGATCCTGTTTGGAGGTCGTGGAAGGCCATATTACGGCG  
CTTATTGGGCAATCTGGTGTGGGTAAGTCGACGTTGGTTAATCGTTTGGTGCCGGAATGC  
CGATCGTTAAACTGGTGTGTCGGGGGTTGGCAAGGGTCGGCATACGTGACGCGAGTC  
GGTCGCTCTTGCCAT

>RXA02459-downstream  
TGATAATGGTTGGATTATCGAAA



>RXA02460-upstream

GCGCCGTCGAAGCCGGACTCGTAGGCGTCTACTACCAGCAATTTGACCGTGCAGTCGTCG  
AAATCGTCGGACTGTTTCGGGCTAGAAGGAGAATTCTAATC

>RXA02460

TTGCGCGTCTACATCCCAGCAACGTTTTCCACACTCCGCGGACTCAATGAATCCCGCGTC  
ATCACAGCACGCTCCGGATACGGTTTTTCGCAGTCACCCAGCACTCCTTGACTTCTACACC  
GACGGTGACGAAGAAGAAATCGCACATGCAGCCTTCCAAGACGCCGCAGAAGCCTCCATC  
CGACTCCTCGCAATCGGCGACGAAGAAACATTTCCCTACCGCAGAGTCGTCTCTCAGTA  
GATGTTGACGACTCCGTGGTGACCTACCAGCCTGAAAACGGCGAATCCGTAGTCAAACCTC  
AGCCCAGCGCACATCAACCTCGACGACGTGGCAGCAATCCACATCGACGTTGAAGCCTCC  
GAAGCAGACACCAAAAAGCTATCGAAGTCATCGACGAATCCGACCTCGGCGAAGAAGAC  
GCCGAACCTACCGTCGGAGACGCCCAAGACAACCTTCATGGCCTGGTACGACCCAGAAGAG  
CTCCCCTTCTAGTCGAGCTCCTC

>RXA02460-downstream

TAGATCACATATCCCACGCGTCG

>RXA02461-upstream

AGAAAATCTCAAGGCAAAAAACAAGCCACCCCAATCTGTGCGACAATCAAACCACAGACT  
ACGACTATTATGTCACGAAGAAACCAAGAAAGGGAAATA

>RXA02461

ATGCGCGGACTAATTGTTGACTACGCTGGAGTACTAGACGGAACCGATGAGGACCAGCGT  
CGCTGGCGCAACCTGCTCGCCGCAGCAAAGAAAAATGGCGTCGGAACCGTGATCCTCAGC  
AACGATCCAGGTGGGCTCGGCGCAGCGCCGATCCGGGAACTCGAAACAAACGGGGTAGTC  
GATAAGGTGCTGCTGTCGGGAGAACTTGGCGTCGAAAAGCCAGAGGAAGCAGCTTTCCAG  
GCCGCCGCAGACGCCATCGACCTGCCCATGCGTGACTGCGTGCTTGTTCGACGACTCGATC  
CTCAACGTGCGCGGCGCGCTCGAAGCCGGACTCGTAGGCGTCTACTACCAGCAATTTGAC  
CGTGCAGTCGTCGAAATCGTCGGACTGTTTCGGGCTAGAAGGAGAATTC

>RXA02461-downstream

TAATCTTGCGCGTCTACATCCCA

>RXA02464-upstream

ACAACCACATCCGGAATGCTCGATTACGTCCGCCATGACACGCAAAGATCTATTGGCTAT  
CACCGAGGATTGCCCTGACGGATCTTCTTACTTGAGGTTC

>RXA02464

ATGGGCACAACACCAGACGATTCCCGAACTCCTGAAATCACCCAAGACATAGAAATAACC  
GATGGCAGGATCGTTGCCATCGGTCAATCAGTGGCTGCGGTGTATACAAACGATCCTTCG  
CCTCGAATCGTCTCCTACAACGATGATGGTGAACTAGTTGGAGAACAAGCAGTCGATGAG  
GTTGAGTTCCCGGATCCGCCGTTTCAAAGCGCGACCGCTGATCTTCCACACCATATGAGT  
TGGTTCAACGGAGACAGCCTCGTACTGTTCTCTCCCACTCAGCTCAATGTACGACAAAGC  
TTCAATGATGCTTTAGGAACCGGCATTGCGTTGAACGGAAGTCTCCTCTACCCACCGCT  
GAGGGCATCACGGTAGCTAATTGGGACACCGGAGAGGTGCAGCGCACCATTCGGGTGGAC  
CGTGCGGGCTACGACGGTGAAGTTGCGCTCGGCGTTGTAGGGCAGGTGATCGTCGAAAAG  
CGTGGCTCTGAGATCGTTGCTCTAGGC

>RXA02464-downstream

TAGATCTCGTTGTTAGCCCAAAG

>RXA02465-upstream

CTGGTGCAATATAAAAGTTAACCAACCAGTCATCCAATATGTCGCCTAAGTAGTCTTCCC  
AAAGTTAACAGCTAGAATCATGGCCGTGACTTCTCCGAAC

>RXA02465

ATGCCTGCATCAATTTCGCTGGGGCGGCATCGTCGCCCTCATTTCAATCCACCATCGGATTC  
GGTTACGCCCTTTTTCCTTATTTACAGGGAAGCTACGGGCGAGACGGATCCAAGCATCGTC  
TACGAAACCGATAACGCCAACACGTGGGTGGCTACGGTACCGCTGCATTCTTCATCATT  
GTGTTTCGGAACGGTTGTTGCAGGCGCAATCAACATGATGAAGGGGCATCGCTGGGGACGC  
GGAGCTGTCGTCATGCTGAATATTATTTGTTGCCGGCTGCGTATTACATGTTTATCGAA  
GGCCGATTCTCCTGGGCGATCGTCACAGGAATCTCAGCTCTCTTCGTTTTGGGCGCACTG  
TTTAATAAGCGCGCCGTCCTTTGGGCTAACAACGAGATC

>RXA02465-downstream  
TAGCCTAGAGCAACGATCTCAGA

>RXA02466-upstream  
CGAACCGCAAAGCGTTCCGCTGACGGAAGTGGCCGCTGGCGGCAGCTACACCGAAACCGG  
TGCTGGCACCTTCCGCCAGGTCGGCGCTGCTCTTCCTCGC

>RXA02466  
GTGGGCGAGGGGCGAGGAACAACTTTTACGTACGTCATTGAGATTGAGGATGGCGTCAAC  
ACGCCGCTTATGGTGGCGACGATGCG

>RXA02467-upstream  
GTGAACGTAGGCTGGGGCTTTTCAAGAAGACACAACTTAGATACTATCGTTGCACGGTTAC  
AATAGGGTCATTCCAATACAACGATTCTTTTAGGAGAGCT

>RXA02467  
ATGGATATCAAGATCGGATTTGCCGATACTGCCCCGTGAAGTGGTCATTTCTTCTGCTTTG  
CAGCAGGATGAGGCCGCTGCGAAGGTGTCGGAGGCTTTGGCTAATGATTCTGGCGTTTTTA  
GATTTGAGCGATGAAAAGGGTCGCCGTTACATTATTCGTAATAGCCGAATCGCTTATGTT  
GAGGTCGGCACGAGTGCTCCTCGTACTGTCGGCTTCGCTGGCGCA

>RXA02467-downstream  
TAGGGGCTTTTAGACACGTGTCTG

>RXA02472-upstream  
ATGATTCTCATAAGGCTATAAAACAATGTAGTTAGGTTACACTAATGGTGTCCGGTTGTGA  
ATAGTGCAGCGGACGGGGTTCCGCTGCGGAGGAGGTCATC

>RXA02472  
ATGTCATTTGTTAACATCACGGCTCTTACGTTCCCTGCAGGGGCTGAAAAAGAAATCGAA  
CAACGCTTCGCGGCTCGTAAGAAGGCTGTAGATACGGCCAAAGGATTCCAAGAATTTGAG  
TTGTTGCGTCCACAATTTGGTGAGGATCGCTACTTCGTAGTTACTCGTTGGGATTCGGC  
GAAGACTATCAAGCATGGTCCGATGCCCCGCTGCCGGTAACCATGCTGATGATGAACAA  
CGTGGCATGAGCGTGGAAGTTCTTGGTTTCGATGTGGTTCTTTTGAAGGC

>RXA02472-downstream  
TAAAAGTCCTTGGCGTGGCATAG

>RXA02473-upstream  
TGCAGTTATGATTAACTAACTCCTAGCAGTGGCCAACTACATGTCTGGCTTAATAGCCT  
ATGAACGCCTAAGCCTGGAGCCACAACAACCACATTCCGA

>RXA02473  
ATGGTCGCAGAGTACCCTGACGGATCCTCGGAAATATTCCCGGTAACGTTAAATTTAATT  
CCGGAAGATACCCCTCGTTTATGACGCCGCTACAAATTCAAAGCATCCGAACCTGGTTCC  
GAAGATCAAATAACCCCATTTGTATCAAACCAACCTGATGTGCCTTTCCCTGCAGGAACA  
TCGTTACATTAACTGGATATTATGAAATTGATCAGCTGAGAAGTGCAGGATGGAAATTT  
GAGCTTAATCCTGTAAACAGGTGAACCTTTCAGTCACAGTTCTATCTCTGTAATTTACCCT  
GATGGGTCTCGTGATAACACAATCGCGACCATGGAATCCGTAGGCCCTGATGATTCTGAG

CTTTTCAAACCAGACTTTGATTTAATCCCAATAAAATCAGGTGACTATATAGAGATAGGT  
GTACTCGCACCAGGGCTTCCTGCTGGTACGGAATTCCATCTCGATTACTACGCACTTCCG  
GATCGATTCTTTGACTTAGGCGGTTCTACAAGCCTTTCAGGCAACGGTAAGTTCTCTCTT  
GGAGTTCCACTTACCTGGAATGATGATCTCCAGCTCCCGATCTCGATTACTTTTCCCTGAC  
GGAAGCCACACAGTTGAGAATTTGCATGTTGACGTAACCCCCGAAACTTTGCTGGCAAC  
CCCATTGACGAGCCTAAGGACGATGACAAGGATCATCCACAACCGGCTCCTAAACCAAGT  
GGCAGCTCATTGTTCTAGC

>RXA02473-downstream  
TAGTTCCTACTAAACAGTTCAAA

>RXA02475-upstream  
TCGCTCATTGAGGACGGACTCGCGGAACAAAATGAGGCGGGTTATTTCCACCTGCCACGG  
TAAACCACTGCGCGCTGCAAAAACAGTAGGTTTAAGTA

>RXA02475  
ATGCTTGGTCTCTCTCGTCGTAAGTTTGCCATGCTCGCTGCCTTAACTGCGGGAATCGTT  
GGCGTTGTTGCCACTGGTTGTAGTACGCCCCGAGAACCTGAAACGATCGATAATCCGGTG  
TTCATTGGTATCTCCATCGATCCAATTAAAAACCTAAGTCCGAATCACGCTGCAAACTC  
TTCGCTTTATCTGCAGATGGCTCGGGAGGAATTTTCCAAGAACTCGTCCACATACTTT  
CCGTCGATCCATCGATTAGGAAACGGATTTCATCGCACCCGATAGAGATTCTTTGGTAGTT  
GTCGACGCTTCTCTAAAGGAAGTTTATCGACACGAAGTGGCCAGGCTTGGTGTGGAATG  
CAAACCTCAATCAGCTAGGTCTCCACTGCATAAATCAGTTGCCTTCTCCTTCAATGAAGGA  
ACAGCTGAAGCCCCATATAGACACCGCATCGTCTCCGCAACTGAGAAAACATCAGCTTCC  
GCAATGACAGATCAGCGGCAC'TTCGCGCTTACTGCATGCGATGACGGATCCACACGGTGG  
GTCGAATATTCCCCTGACCGCGGAATGGAAGATCCAATGGGCCCCGGCTCAGCACGCATC  
GTGACTCTCCAGGCCGACGGAGAATCAGTGAAATTGACGTTGAGTGGAATTTCCCGGAT  
CGCCCTCCGCCCCAATTATTCTGTCTTGCGAAGATCCAAGCGCTTATATAGTTTCAGAA  
GAAGACATCATCTATGTAAAAGACGAGGTAAGCCCTGCCGAATCCATAGGAAAATTACCT  
GCATATGAAATTCCGGACCGCGCCCGATTTCGATACAGTTTCCGGCGAAGACTACTTCGCT  
TTTACGTCAACTGGGATGCTGACACGCATCAATATTCCCCAAGCAAAAATCGTCTACGCA  
CAATCCATTGACCTCTACGGCAAGCATCCGGTTTCCATAACTTTTCGATTCCGACCGTGCA  
TACGTGGTTACTTCCGGGGATTCCGGGGAAAGCCTTCTTGAAATCGACTTGAATGATCCA  
ACATGCACTTCAGATCAGCTCTCGCTCACTGGTTTCAACAAATTACTCACAGCTCGGAAA  
CCTAAGCCAGAACCGTCGATCATCATCGAAACCATCTTGCCAATTGACCCAAACTACTCA  
CTGGGTTGTAAGAGT

>RXA02475-downstream  
TAGATTTTGGACGGAAGTGTGTA

>RXA02478-upstream  
GACATCGTCGAAGCGCTCTCCAGCGGCAACATCGACGATTATCGCAGCGCCGTGCTCGCT  
CACTACGCGCCGTTTCGCCGCATGATTTCCAACATGCTCG

>RXA02478  
ATGCGCACTAGCCTCATTGCGCGCGGGTTGTACCGCATTCGCGCGCTGGTCTGGGATCAG  
GGTCTTTTAACGCTTTTCGACGCCCCGCTCAGTGTTGACGACCTCCCCGCACCCATCGAC  
GTGGTGTACGCGCATCCTCAGACGGCATCACCTGGACCACCCAGAACCAAGCAATCGTC  
GAAACTGAACACCGCGGTGTGGGCGATGTCTGCCTTGTACGCGGCGATCTGTGCTTCCAC  
GGATTGTCCAACCTCGCAGGATTTTTTGGAGGATCCCACCGACCTTGAACCCCGGCTGGCG  
CGCCGGGATGTGAGTGGGTGGACGTCGATAAGCATGGCCCACTATTTTGCAGGATGTTGAT  
GCCGCGTTCGCTCGTCGGGGACGGGACTTGTCTTGGCGGATGGGCGGTGGATTTCAGAGT  
TTTGTGGTGGCGGCGGGCGGAGATTTTCGCTTCGGATTCTGCGCAGCGATGGCCACATC  
ACCGATATTGCCGGCGGTAAACGAATCCCGGATGACGCGAGCTGCCGAGCGGTTCGGATTGTG  
CTGCATTCCAGGGGGGTGGGACACCGTCTGAGCAGTGTGTCCGATGATTTCCGGGGAGACA  
TTCACTCCGCTGGAGCCTGTGCCTGAACTAATCGACCCCGGCTGCAACGGCCACGTGTTT  
TACTGAAAAGCGGCTGGAATGCTCGCCGCAACGCACCTGGCGGACCTGATCTGCGACGC  
CACTTGGTGGTTGATTTATCCAGCGACGAAGGAGCGACCTGGGCGCATCGCATCACCATC  
GAGCGCGAAGAAGCCGCTATTCAACCGCTGCGGAAATGCCCAACGGAGATGTTGCCGCTG

GTGTGGGAAGCAGAGGGAACGCGCGGATAAAATGCACGGTGATCAGCGTAAATGATATT  
TCGCTGCGGATCGATGAGCCCATTTCCGATGCCATATCCCTCCGCCATGTGGTGATCAAC  
GATGACCATGACGGCATCGAAGTCGCACTGCCTGACGCATCGCAATGGGGTGAAGGTGTA  
TTCAAAATTTGTGTCCAATCCAGACGCGAGCACCCAAAAAATCCGCACTCGAGGCAAGCCC  
GCGCGACAGACCCCTGGAAATTGGGGATGAATTGGTTTTTATATCCGCAAGGGTGGAGAA  
GTGGCTTACGGCGTCACGGTTCCTTATGATGGTCGCTCGTTGGGGAAGTTAAACAGGATT  
TTGGAGTGGGGCTGTAGAGGCCGATTTGCGGTCCCTT

>RXA02478-downstream  
TAATTGCGG

>RXA02482-upstream  
AAACGGTGGCGCCTTAATTGTTTTACGCGTGCTGACAGGAACCTTTTAGGTGATTAACCT  
GGTTTGCAACTTTCCAACCTCAGCCGGATAAGGAACACTA

>RXA02482  
GTGGGCGTGCTAAATCAAAGAAATCTGCTTTACCTAAAGTCCTGCTCACCATCGTGGTG  
ATCCTGCTCCTGCTCGTGCTGGTAGCAGAATTCGGGCTGCGCTTCATGATCGGAAAACAA  
CTGAAAGATGAGTTCCAAGCTCAGGCTTCCTCACAAGGAATCTCTGCAACTGAAGAGCCC  
TCCATCAGCTTCGGCGCATCCCCACTCCTGTTAGGCATCGCTCGGGGAAGCATCAATGAA  
GTCACAATCGACACCCCCGACTCCGTATCCATCACTAACCAGACGGTGTCCCCCTCCATC  
AGTGGCACACCAGAGTCAACTATCCAACCTCAAGGGCTTGATATCGGTGACCGCGACAAC  
CCAGTCGCAGACCACCTCACCTTAACCACATTGGCAACCGACGATTTTCATCCTGGCAACC  
ATCCAACAGCAGATGGCCGAAGCAACCGGCGGGAACAGCACCTCCCAAGGATTCGCAGAA  
CAGCTTATCCAGGAATCATCAAAGTCACCGACATTACTTCCGATGCAGCTAATCAAACC  
ATCGAAGTTGAATTCACCGACGGCGCGCCCGAGCCTCACTGCACCCCATCGTAACGAAC  
GGCCAACCTCGGCTTTGAGATCGTAGATTCCCAACTCTTCGGATTCGGCCTCCCGGATGAA  
ATCTCCCAAATGCTCACCGACGCACTGCAATCATCAATCAATGAAGTAGCCGGTGGCCTG  
CAAATCCAAAGCCTCGAAGTTGTCGACGCTGGCATCAACGTCACCCCTGACCGGAGACAAC  
ATCAACATCCAGACCCTAGAAGCCGCACAG

>RXA02482-downstream  
TAAAGAGCGCTTTTCGCGTCTGTG

>RXA02483-upstream  
CATGGGCCCTGCAATCGAGCCTAAGGTTGCCGACGCACTCGGCGAGCTCTTCGCAACGA  
AGGCGCTCTGACCGAAAAGTGGATCTCCGAGAACCTCTAA

>RXA02483  
ATGGCTGATCACGCCACAACTCTGCGCGCCTCTTTCCGCAAGGGTGCAAACGGAAAGCAG  
AAGCCAATCGGCGTGATCACCCGCGGCACCACCGGTGTGAACCGCCTACGGCGCTTCGAT  
CGGTGGTGCTTTTCATCATCCCAAAATACGTTTCGCTTCTCGACGCCACTTCCCTGGCGTTA  
GATGTCGGGTACGGCGCCAGCCACACAACACCGTCGAATGGGGACGTTGGCTCCACCGC  
CTCCAACCCGACATGGATGTCATCGGCCTAGAAAATCAACCCCGAACGAGTCCTCGAACCC  
CAAAACGGCGTGTCCTTTGAACTCGGCGGATTCGAACTTGCCGGCTACACCCACAACTC  
GTGCGCGCCTTCAACGTGCTGCGCCAATACGACGTGGACCAAGTCGAAGCCGCATGGGAA  
ACCGTCACCTCCAGACTTGCCCCAGGCGGACTGTTTTTCGAAGGCACCTGCGATGAAATC  
GGCAAACGCTGCACCTGGATCACACTTAACCTCAGACGGCCACAAGAACTCACCCCTGCA  
TGGGATCCTTGGGGAATCTCCACCCCTCCGATGTGGCCGAACGACTGCCCAAAATGCTC  
ATCCACCGCAACATTCCTGGTGAAGAGATTACGCACTGCTAGCAGCCGCTGATTTAGCC  
TGGGACTACTGCGCCGGCTGGGAACCCACGGACCGCGCGTGCGCTGGGAAAAAGCCCGC  
GAGATGCTCATCGACCAAGGTTGGCCCATCGCAGTGTCCAGGCGACGCGTGGGCGATAGC  
CTGCTGACTGTACCGTGGGAAACGGTGGCGCCT

>RXA02483-downstream  
TAATTGTTTTACGCGTGCTGACA

>RXA02484-upstream

CGGCGAAAGTGACTTCCGAATCGAGTTCGACGCCGTCGATCGCGGCGATTTCCTGGGCTA  
GCGATGAATCCAACACCCCACTAACGGTAGTCTTATCCTC

>RXA02484

ATGGCAACGCGTACAGAAAACACCATTACGATCAATCAGCCCGTCGGCAAGGTGCACCAA  
GCACTGACCACCGAAGCCTACTGGGCATACATCGCAGAGAACCTCTCCCCGAAGCTGGC  
GAGGTCAACGAGTTTACCAGCAGCTGACGGTGGCGCAACCGCAACCCCTTTTGAGGTCTCTC  
CCACTCGAGGTCTTCCCAGAGGCAGTTTCGCGCAATGATCAGCCAGGCACTGAAGGTCAAG  
CGAGTCTTACGGTCTCTGCACTGACCAACAACGCCACAACCGTCGAGTACAACGCTGAC  
GTCAAGGGCACCCTGTGATTTCAAGGGCACCATCGCCATCAACGGCGACGACGCAGCA  
ACCACCTTCGACTACAGCAACGAAGTGTCCGTGAACATCCCATTCATGGGCCCTGCAATC  
GAGCCTAAGGTTGCCGACGCACTCGGCGAGCTCTTCGCAAACGAAGGCGCTCTGACCGAA  
AAGTGGATCTCCGAGAACCTC

>RXA02484-downstream

TAAATGGCTGATCACGCCACAA

>RXA02486-upstream

TCCGACCTCGTCGCATTAGCCAAAGAAATCCGCGACGGAGTCCCTCGAAACCTTCGGCGTC  
ACCCTCGTCCCAGAACCCGTCCTGGATTGGAATCAGCATCG

>RXA02486

ATGACTGAATTTTCCGACGTCCCTGGCACCGCCGCCCCACTGCACAGGGCGTTGGAAAAT  
GCCGGATACTCCACTTTAGAAATCCCTCGACGGTGTTCCTACAAGACGTTGATTGCCCTG  
CATGGTGTGCGAAAACTGGCCTCGGCAGGATCCAGGCAGCATTTGTTGGAACGTGGCCTT  
TCCCTGGGGGAAGAAACAAAAGGCGCCACCATCACCCAGGTCACACCGGTAAAGTGGCC  
TCAGATATCAAAACTCACATCACTTCCGTGGATCCCGTCGCATACGTCGATGGTCTAGAG  
GGGCGTCGGGTTGCTCACGGGCACCAATTGCTATCGATCTTCGGTCGCGTCACCGGCGCG  
GAACCCAAAATGTGGGGACCCCTCATGATCGGATACGGCTCAGTCCACTACGTTTCCAC  
ACCGGAAGGGAAGGCGATTGGTTTCAGTGTGGTTTCAGCCCGGCGAAGTCCAAAATCTGC  
CTGTATGGCCTGAAGGATTTCGCCTCGCGGTGAGGAATTGCTGCAGAACTTGGAAAATAC  
ACCGAAGGCCGCGGATGCGTGTACATCAATAAACCGGAAGACATCGATTGGATGTTTTA  
GAGGCCATGATCAGCGAGTCATGGGCCGGCCAAGGC

>RXA02486-downstream

TAGGTTGCAAAATCCCCACCACAA

>RXA02488

AAGCTGACTGCAACTGGTGTGATGTATGGGCACCTTCTACCCAGAAGGTGAAGCACTT  
GCGCCAATCACTTTGAACCTCACCAACGAAGTTGTATGCGACGAGCCTGAAACCCCGTT  
GAGCCTGAGGTTCTGTAGAGCCTGAGACTCCAGTAGATCCGGAAACCTCGGTGACCCCA  
GAGACTCCAGTAGATCCGGAAACCTCGGTGACCCAGAAAAGCCTGGCGATGACAACAAG  
GATGACGGAAGCAACAGCAGCAGCAACGGCGATATCCTCGGAATCTTGGGCATCCTCGCA  
GCGCTTGGTGGCGTTGGTGCACCTTGTGTACAACTTCTGGTAGCTAGCGGATTCTTGCA  
GCGTTTAAG

>RXA02488-downstream

TAAATGAATCGTTTTCTAGTGC

>RXA02489-upstream

TATCCTCGGAATCTTGGGCATCCTCGCAGCGCTTGGTGGCGTTGGTGCACCTTGTGTACAA  
CTTCTGGTAGCTAGCGGATTCTTGCAGCGTTTAAGTAA

>RXA02489

ATGAATCGTTTTCTAGTGCCTTATTAGCAGCCTCTGTGCGGGGGCTGCGTTGGCCATT  
CCAGCGACCTCTGCACATGCAGCAGAATCTATTTGTACATTCACCGGCGATGTTGGGTGG  
AATGTGCGCGATTCTTTCAACAGTTATCTTTTGGGAAACATCGCAAATGGTAGTGCTTAT  
AAATATAAGGGCGGGTTGGACGTTCTGTGACGCGTCCAGACCGACGGTAACGGCAAACT

CCAGCACTGACCTGGCCAGTTGATTTCGGTGACGTCTTCGAAGATTTCCACTTCCGGAGGC  
 GCGCACTGGACCGGACACAACCTGTACCCCGGTGATGACCTCGCGGAAGTCCCTAACAAT  
 TTCACGTTGGATCTTGATTTTCCAACATCACTGTGGAGCTGAGTGGTTCTACAGGTCCG  
 TTGTTGGTGGATTACACATCTCGGGAATACATCAACACCCACACGTTGGGTGAGTTTCAA  
 ACTGGTGAACAGGCTGAGCTTGCCACGATTACTTTTGCCAAAAGCTCCAGACCTCACCTCT  
 AATTCACTCAACGTGACTGGCGATGTGGCATTGACTGCTGATGGTGTGGAAGTTTTCGGT  
 GGTTTCTACACGGCAGGGGAGGAG

>RXA02495-upstream

AAGGAGGAAAATTATCACCGTCTTAAAAACGGCTAAGGCTTTTCTAAATTTCGCCGCTGCG  
 CACCATCACGTGGCGCAGCGTTGTGGCGAATAAACTCCGC

>RXA02495

ATGGCATTAAACAGTGCTTTCGGTTGTGCTAGGAACCGCATTTTGTGTGGCTCCCTCCTC  
 CTCACACATTCCCTTGAAAGAACATTTTCCTCCATCGTTGATGCCGGCGTGGAGGGCGTT  
 GACGTGGGCGTTATCGCGCAACAAAACAACCCGACGGCGTACCTTTCCTCCGTCATCGCC  
 GAAATTGAGCAGTATCCGGAAGTCCGCGCCGTC AACATCATCGGCGACGGCCCCGGCATG  
 CCCTCCGGACACCACATGACCGGCCAATCCGCGCTGATCCTCACCGACTCCGACGGCAAT  
 CCCCTGCAAGCAGGCGAGCTCCGGCAGCGACCCGCTAGCCATTATCCGCAGGGCGAGTGG  
 GTCTCGCCCGAGCCAACGCTTATCGACGGCCACTTCCCCACAAAACCCGACGAGGTAGTA  
 GTCAACGCTTTCGGCCGCCAAACGTGGCGGGCTCTCCCTCGGTGATCACCTAACGATCGTC  
 ACACCCACCGAACGCATCGACGCCACCCTGTCTGGAACCTTCGAATCAAACACCGACGTC  
 GCAGGCTGGGTTCGGAGTCGGATTACCCCCACAGCGCTACGTCGAATGCTCACCAACGGC  
 ACCGACGCCAGCCAAATCACCATCGCAGTCAACGACGGCGCCGACCCCATGGCAGTCCGC  
 AACCGCATCGGCCAAAAACACCGGGACCTGCTGCCCCCTGCTGCCCCGAGCAAATCATCGAC  
 CAAACCACCGGCGACACCGACCGCCAACCTGGAGTTCATGACCTACGTGCTCCTGGCATTC  
 GCCGCGATCGCACTGATTGTTGGCTCGTTTCATCATTTGCCAACACCTTCGCGATGATCGTC  
 GCCCAACGCACCGCGAATTCGCCCTCTCCGTTCCATTGGTGTCTCCACGTTCCAAATC  
 GGATTCTCCGTGATTATGGAAGCAGTATTTCGTCGGACTTATCGGCGGTTTCATCGGCATC  
 GCAGTTGGCTTCGGAGTGGTCAATGCACTTGTCCAAGTGTCAACCAATTCGGCGACACC  
 CTCTCCTCCATCGACATCACCTACAACGCCGGATCCTTCATCTTCCCTGTCTCTTCGCC  
 GTCAGTCCACCGTACTAAGCTCCATATCGCCTGCTCACCGCGCCGGTAACCTCCCACCA  
 GTCCAAGCATTCGAATCCTCCGATGCACGCAGCGACGCCCTCGGAAGGATCCGCTTCCTC  
 GTCGCCGCCGTCATGCTCACCTTGGAAATCAGCCTGACGATCGCAGGTGCCGTGGTATCC  
 GCCATCAACGGAGATGAATTCAAACAGAAACACGCCTCGCATTCATCGGCGCTGGACTT  
 CTCTTAGTGTCTCTCACTCTCCCTGTCCGGTCCCGCACTGATGGTGGCGACCTCTCAG  
 ACTCTTGGCGTGGCGATAATGTGCGCCGTTCCGAGCCGTCGGCAAGCTCGCACAAACGCAAC  
 ACCCTGCGCAATCCGCGACGCTCCGCAACCACCGCACTGGCCGTCACTTTGAGCGTTGGC  
 CTCGTGCGCTGCGTTGGAGTCATCGGCGCCACCACCGCGCCAGCGTCTTCGGGTCCATG  
 GAATCCACCATCAAATCCCATATGTCTCGACAGCATCGGTGGCACCATGATCCCTGGA  
 CAACCCGCCGGCGGTTCAAGGTCACTGTCCATGTCCGCAGCCGTCGCACAGGAAATCGCA  
 CAAACCCGCCGGAGTCGGCAAAGTGGGCACCCCTCATGACCGGCAGCGTCCAAGTCAACGGA  
 TGGGACAACGAAAACACCACAATTTTCGACGGCGACCTCTCTCAGTTCTTCGACCTCGCA  
 GTCCGCTCCGGCGACGCCCTTCGACGACGAAACCCCGCGTCATGATCTCCACCACCTAC  
 GCCGACCAATCCGACCTCGAAGTAGGCGACACCGTCACCGTCAACCCCTACGGATCCGAC  
 GACGGCATCCGCGTCCCCATCACCGGCATCTACGCAGAAACCAACCTCGTCGGACACCTC  
 ATGGTCAACGCAGCCGCCACCAACCGAGTCCTCACCTCCGCGGACACCTACCACCGGTCC  
 CAAATCTTCGTCAACGGCGACGGCTCCACCACCAACGAAGAACTCCGCGACATCCTCGTC  
 GACGCCGTAGCCCCCTTCCTCATCGTCCAAGTGAAATCCAAAGATGAATTCCGCGGAAGC  
 CTCGGCACCCAAATCAACCAATTGCTCGGCATCATCTACGGACTGCTCGCCCTGGCAGTG  
 ATCATCGCAGTCTTGGGAATCGTCAACACACTGTTCTCTCCATCAGCGAACGCACCCGC  
 GAAATCGGAATCCTCCGCGCCACCGGCGTCCAACGAGGACAAATCCGCGCATGATTACC  
 CTCGAATCCGTCACTCTCTCCATCCACGGCGCAATCCACGGACTCCTCCTAGGTACATTT  
 CTCGGTGGGCAATCGTCACTGTCTCCGACCCGAGGCATGGCACCCGTCGAATTCCCC  
 TGGACCCAAATCGGATTAATGCTCATCTCCGCAATCATCATCGGAGGCATAGCAGCCCTC  
 ATCCCAGCCAACCGAGCCTCCCGAATCTCCCCCTTGAAGCAATCAAC

>RXA02495-downstream

TAACAGTCTGCATCGGCAACCTC

>RXA02496-upstream

CGGGACGCGCTCTACTGCAACTAGGTGGACAGTATTGCTGCCACATCTAATACACCTA  
ATCTCACACCTAAAGGTTAGACGGTCTAGGGTGGCAAAGT

>RXA02496

GTGAATCGGTCAAATTCCTTCGGTATTTTTAGGTTTCCCCGAGTCTTCGCCAGCGGCG  
GCATCGATTCTGTGCTGGGGAGGAACCTCCTCTTGATTTCACGTGAATGGTATGAATTC  
ACGGATCCAACGTATATTGAGCATGTATTTAGCATCGATTTAACGTGGCTTGAGTCTAAT  
TGGAATTGCACCTTTGGTACCCCCGATTGTTTAGGTATTGATTCCGAAAACGCCGACGTG  
GGTTGTTGCGGCCACGGTGCATTCTTAGCAGATGAGACAGATCGAGATCAGCTTTATGAT  
GCCGTTGCTCAGATGCCCGCTAAGTATTGGCAGCTACGCCCGCCTCCACGGACTCGTTT  
TTAGCATCCGATGACGGCACCGACATTGAGCCGTGGCTGACATGGGATGAATTAGATGAT  
GAAGACGGCAATCCCGAGCCCGCTTTGAAGACAACGTGGTCAACGGCGCCTGTATTTTT  
GCCAACAGGGCGGGTTGGGAAACAGGCGCGGGGTGTGCGTGCATCAGTGGGGCGTGAAC  
GCAAATGAGGATCTAACCGTCGTCAAGCCTGAAGTTTGTGGCAGCTCCCGCTGCGCCGC  
CTGGAGGCCCTGGGAAGAGCGCCCCGACGGGCAAGAAATCTTGCGCACCACAATTACTGAA  
TACAACGGCGCGGCTGGGGCAACGGCGGCGAGGATTCGACTGGTACTGCACCACCTCT  
CCGCGCTGCCACACCAATGCCGAACCCATGTGGAAAACACAGGAAACAGAACTCCGTGCA  
CTCATGGGACCAAACCTCTACGAGGTG

>RXA02496-downstream

TGACGTAAATATTTGGAAGCACG

>RXA02498-upstream

CAAGGTAGAAATTTGTCCGTGGGCACTTCGTGAAGGTGTGATCCTCACCAGGATCGACAA  
AGGACTCGAGTAACATTTACCCGAAAGGAGTTGGCGAAA

>RXA02498

ATGAGTGAAGAGAACTCACAGTCGCTGAGCTGATGGCGCGTGCCGCGAAAGAGGGACGC  
TCCACCGATGCTCCCCGACGACGCAGGCGCCGACGATCGAAGACGGTGGCGTATCCGTT  
GCTGAGCTGACCGGCTCCATTCTGCGCTTAAGGAAAAGCCCGCGAGTCCAAGCACTCC  
AGCGTGCCCATCGATGCACCAGCAGAACCTGAGGTTGTTGAGGCCCCCAAGCCTGAGCCC  
GCCGAAGAAGTAGAAGTGGCTTCGGTGGAGGGCGACGTCGATAAGCAGGAAACCCCTGAG  
CGTCCGCGCGCGAGCAACGAAGAAACCATGGTGTGTCGCATCGTGGATGAAAAAGATCCA  
ATTAGCTTGACGACGGGCGCGTTCCCCGTGGTTCCGGCAGTTGCCGCCAAGCCGGCGCCC  
GTAGTGCGCGCGGAGAAGGACGCCGATGTGGAGACTGCCGTAAAGGCAGATTTTCGAGAG  
GTGGAAGTCGATAACACTGACACCACGCAGATGGCTGTGGTGGGAAGAAGTTGACGAGGAG  
CCAGAGCAAGAAAACAAAATGTCCGTATTCGCGATCATCATGATGGCGATCGTCGGAGTT  
GTTCTCGGTGTCGTTGTATTCTCGGCTTTGAAATGCTGTGGGAGCGCCTGAACAAGTGG  
ATCGTTCGCTGTTCTGGCAGTCGGCGTGACCTTGGGAATGGTGGGCATCATCCACGCTTTG  
CGCACCTCACGTGATGGTTTCAGCATGGTTCTCGCAGGAATCGTGGGCCTGGTCATGACG  
TTCGGGCCGCTGGCAATCGTCATG

>RXA02498-downstream

TAATTTGTCGTTTTTGGGCCCCCG

>RXA02500-upstream

ACGCGGGTTAGATTTTTGCTCGCGATCCGAAAGTGCACTTCGGCAAAAAGTCTGGCAGG  
TTTTGTACGTACAACATCGATTTAAGCGAGGGAAACCGTA

>RXA02500

ATGGGTTCGTGCATCAAGAAGCGCCGCAAGCGCATGTCCAAGAAGAAGCACCGCAAGATG  
CTGCGCCGTACTCGTGTCCAGCGTAGAAAATTGGGCAAG

>RXA02500-downstream

TAAGCCTTCAATTGAGCTTCAAA

>RXA02505-upstream  
TCGGAAAAGCAATCCGGAACATTCAGGTTGTAGACAATGTCATCAGTTCAGTTGACCGTCC  
CATTAAGCGCACTGGTTCGTTTGCCTATTCCGGGGGTCTTT

>RXA02505  
GTGGCTGGCACTCATGCGTATGTCAATGAAACTCTTTTCGGAAAATGAGTTCAGCATGTGC  
CGAAAGAATGAACCTGGTTTGGTCATTGAGCTGGAGAACATCAGCATCGATCGCATTGTC  
ATTTCCACACCAGATGCCCACCGCTATGCGGATGAGCTCATGGCGGCTGTT

>RXA02505-downstream  
TAGAACTCAGTTTCCGTCAATAA

>RXA02506-upstream  
CCTTTCCCTGAACTCTAAGCAATTGTGATCTATAGTACAAATGCATAAACATTAACCGTG  
ATATCCATCTCTTGCATACCGGCCGAAAGGTTTAGCACAC

>RXA02506  
ATGCACCTCAATCAGCTCGAATTTTTTCATCGCAGTAGCCCAACACGGACAGATCAACCGC  
GCCGCCGAAGAATCCTCATTTCCTCAACCCGCTCTCAGCCGACAGATCTCCGCACTTGAA  
AAATCCGTCGGAGCTCCACTCTTCGAACGCCATTCCCGCGGTGTCTCCCTCACAAAGGCC  
GGAGAAATCCTCCACGAAGAAGCCCTCCGAACGCTTAGCAGGATGCAATCGGTAGTCGAT  
GAAATCCAATCCGGTGAGCACCTCATCACCAGCATCAACATCGGAGTTCCCCCTGGAATC  
CCCATCGACTGGTTGCGCTGCCAACTCATCGATTTAGGCCCGAGACCCGCATTTCACTG  
ATCGAATCCCCCACCAGTGATCAGCTAAACTTCTTAAACAACGCGAACTCGACATCGCC  
CTTTGTGTCAGCCAAAGCGAGGCCCTTTGCCACCACACTTGTCCACGAACAAGAACTGGGA  
ATCGTTCGTCGGAAAAAATCCGAACTGCACCAAAAAGTCGCAGGAAAAGACAACGCCACA  
CTCTTCGATCTTGAAGGGCTTCGAGTCTCGCACACTCCCGCGGTGAAGTAAGAATTCAG  
GAAGAAATCCTCAAAAACGCCATGCTCGCCGCGAGGAGTTAATGCCACGTGGATCTTCCGA  
AAATTTGGGCAATATAGCTCACTGATCGCAGACCTTGTCCAGGCCGATGTGCGACTCACA  
ACAGAGGAATCCGCCCGCACCAACTTCCCAGCTGGCAATGGGTCCCCATCGAAGGCGAA  
GACGCCCTCCGGAAATGACCTTGTGTTGTCGACCTGGATCACCTGGAACCCCCAACCACCC  
CCCGCGGTGAAGGCCCTGATCCAGAAATTTATTGACGGAAAC

>RXA02506-downstream  
TGAGTTCTAAACAGCCGCCATGA

>RXA02510-upstream  
CCCGTCGATGAGGCAATCGCTGTGATTTCTTCCTGGATTGGTGACCGCATCAATGATCAG  
CCGAGCGAGGACTCCATTGCAGCTCGCAGGTAGCCCTGAG

>RXA02510  
ATGGACTCATCTGACAGCCACGTTGGTCAGGATGTATATGTTGATCAAGGTCTAGGGGAG  
CCCGACAGACTGGAACGTCTGTGGGCGCCCTACCGGATGAGCTACATCAACACTCGATCT  
GGCGGTAAGCAATCAACTACCGCCAAGCGGGACCCCTTCAATTGAGGTTCCCCAAATGAGT  
GATGAGGACGGCCTGATCGTTGCGCGGGGTGAGCTGGTGTATTGCGTACTCAACTTGAT  
CCCTACAACGCTGGACACATGATGGTGATCCCATTCGTAAGGAAAAGAATCTAGAGGAT  
TTGAGCTTGGCAGAATCTGCGGAGTTGATGCTCTTTACCCAAACGGCCATCAAGGCGCTG  
AAGCAGGTGTCAAACCCTGATGCTGTCAATGTTGGTTTAAACCTTGGCAAAGCATCGGGT  
GGCTCAGTGGGAGATCACCTTCATGTCCATGTGGTGCCTAGGTGGTTCGGGTGATGCTAAT  
TTCATGACTGTGATTGACGGTGTCAAAGTGCTACCGCAGACCCTGCGTCAAACCAGGGCC  
ATGCTTGCGCAAGCATGGGGCACCATTGATGGGGCACCAGGCACTGTGACCCAACGCTG  
ACTTCAGCGATCCGTACCGCAGCACCGAAGGAGCAC

>RXA02510-downstream  
TGATGCTGGGACTTCATGGACGT

>RXA02514  
AACTCCCAACAACCAACCCAGTAACCATCACGGTTACTGGCAAGGGTGAAGGCGTTACC



TCTTTTCGGCGCAATCTCCATCGAGGTTGAAGCGGGCGCAGACGCTATCGTCGCACTGCAG  
TACGTCGGATCCGGCACCCACGCTGACAACGTCGAATTTCATCGTTGGCGACAACGCACGC  
CTGACCGTCATCACGGACACCCACTGGAACGCTGACGCAGTTCACCTGAGCAACCAGCTT  
GCACAGCTGGGACGCGACGCAACTCTACGCCACACCGTGGCAACCTTCGGTGGAGAAGTA  
GTCCGCATCGTCCCACGCGTGCCTTTACCCGCACCAGGTGGCGACGCAGAAATGCTCGGC  
GTCTACTTCGCAGATGATGGACAGTACTTCGAGCAGCGCCTGCTGGTTGACCACGCTGTA  
CCAAACTGTCGCTCCAACGTCTTGTACAAGGGCGCACTTCAGGGTGACAAGAAGTCTGAC  
AAGCCAGATGCCCCGTACCTGCTGGGTGGCGATGTGCTCATCCGCTCAAACGCCCCACGGC  
ACTGACACCTACGAAGCTAACCGCTCACTCGTCCCTACCGAGGGTGCACGCGCAGACGCT  
ATTCCAAACCTCGAGATTGAAACCGGCCAGATCGTTGGCGCAGGACACGCAGCAACCGTC  
GGTCGTTTCGACGACGAGCAGTGTCTACCTCCAGGCCCGTGGTATTCCTGCAGAGGAA  
GCACGCCCGCTCATCGTCCGCGGTTTCTTCAACGAAGTGATCAACAAGGTCCCAGTTGAA  
TCCATCCGCGGGGAATTGGACAACCGAGTCAGCTCGGAACTCGCAGTTCTTGGCATG

>RXA02514-downstream  
TAATTAAGCCAAAGTAACTAAGC

>RXA02518-upstream  
CGCGTGAAGTGCGCGCTGCTTGGGTGGAAGGCTTTCAGGCGGCAACCGCTGACGCTGTT  
GCGCACGCACATTAGCCCGCTGTATTAATTGGAGGAAACC

>RXA02518  
ATGAGCGAGCACACCGAGAACACGACAGAGGTTGAAGACCAGAACGCTTCCACCTTTGAA  
GCACAAAGCTCTGAGCGCCCAGAGCAGTCCGAGGCAGACCTGGCTAAGGCCAGCGATGTT  
GAGGAGTACATGCGCGACGTTATTGACCCTGAACTGGGCATTAACGTTGTTGACCTGGGC  
CTTGCTCTACGATATTTACATCATCAACGGCAACGAAGCTCACATCGATATGACTCTGACT  
TCACCAGCTTGCCCCGCTGACTGACGTCATCGAAGATCAGGCACGCACCGCAATCGTCGGC  
AACGGCATTGCAGAGAAGATGTCCCTGAACTGGGTATGGATGCCACCTTGGGGTCCACAC  
ATGATTACCGAAGAGGGCCGCGCTCAGCTGCAGGCCCTAGGATTTCGCGGTT

>RXA02518-downstream  
TAAAAGGCTGCTTATCGACGCCA

>RXA02519-upstream  
TGTTTTAAACTTCATTCCAATTACCGAAAAATGAATATAATTTGAGATTTAGCTCACACT  
ATCCCCCTTCGGGTCAACACAGACTCTGATGCGAGGTAA

>RXA02519  
ATGTTCTCCGCTCCCTTGCGTAGAATGATGCGAGTGACGAAGGACGAGCAGATTCAACCC  
AATTCGAACGCCCCGTAAGAACAGAAAATGGTTTCCTCGGGCACCTCGTCCCCCTACGCCAA  
TTTCTCGACACTTTGCCGCGCATCGGCACCGCTGGTTCCAGATCAGCGACCCTCCACGTG  
GAAGACGAGCAGAGCCCTTTAGGGGCAACGCTTTTCGACGTCGCGACCGGCGCGAGCTCC  
ATCAACGACCGCGATACCGACGCTCAGGGCTTGAGCCTGAAAAGATTGCGCGATTTGCA  
TGGCTGCGCCTGATCGGCACCATGGGTGCGTTAATGATCGCGTTTGGTGCGCTGGGCGCG  
GGTGCACTTCCGGTGGTGAATAATCCGTATGTGGATTTCCTTGGCGGAACTTCATGAGC  
CGAATGCTGCAGACCTCTTCCATGATCGTGCTCATCGGCGTGGGATTTTGGTGCTGGCG  
TGGGTGTTAATGGCACCGCTGGTGGGTATTCTTTTAAACGCAGCGGAAACAGAACAGCC  
AGCGTGAGTTTGTCCATGCTGCGCCGCACATTTGGCGCCTGGGTAGCGCCCATCATGCTC  
ACCGCCCCACTGTTTACTCAAGACATTTATCTTATCTGGCACAAGGCTCTGTGACCGCG  
CAGGGAATGGATGCCTACGCCGGTGGACCGCTTGAACATTGGGGCCCGATAATCATCTG  
GCACGGTCCGTGCCCTTTATTTGGGCCCAGTCGCCCCCTCGCCCTACGGCCCTGTTGCGCTG  
AGCATCGCGGCGTCGATAAGCGTTATTAATAATGACAGCATCGTTGGAGGCGTGCTGGCG  
CACCGTATTGCGTCGCTGCTGGGCGTTGTGGCTGCAGGCTGGGCGATCACCATGCTGGCC  
AGGCGTGTCGGGTATCTGAAGAAGCGTCTTTTACCCTGGGCGTACTTAATCCGCTGCTG  
ATTCTGCACCTGATCGGCGGTATTCACAACGAATCCATCCTGCTGGGATTTTACTTGT  
GGCCTGGAACTCGGAAGTGGTGGCACCGGACCGGATTCAAACAGGGCTGTGGGGGCTGCG  
TGGACATATATTGCACTGAGTGGCGTATTGATTTCTTGCAGGCGCTGGTCAAGGTGACC  
GGCTTTATTGGGCTCGGTTTGTGGGCATGGCCTTGGCCAGGGCGTTTCATGCACGTGGA  
CATCGACACGTCGTTGCGATCGGCGTTGCAGGCTCGTTCAAGTAGCAGCCCTGGTGATC

ACCGTGGTTGTTCTCAGTGTGATTACCGGAATCAGTTTGGGGTGGATCACAGGTCAAGGT  
GGCGCTGCGACGATCCGAAGCTGGATGTCTATGACCACCAACATTGGCGTTATTTCTGGA  
TTCATCGGAATGAATTTGGGGCTAGGCGACCACACCGCAGCCATGCTCGTTGTGACCCGT  
GCAGCCGGAATCGCGGTAGCTGCCGCCCTTCATGGTTCTGTATGTTGTTTGCCACATATAGA  
GGTCACATTACGCTGTGGGCGGACTGGGCGTGGCGACTTTCGTCCTCGTTATCCTCTTC  
CCCGTGGTGCAATCCGTGGTACATGCTGTGGGCTATCGTGCCGCTAGCTTCCTGGGCAAAT  
AGACTGTTCTTCCAGCTCGGAGTGATTGCCCTACTCCACTGCCTTCAGTTTCTTTGTGCTG  
CCTCGCGGGCTTGCACTTCCAGTCGGAACGTGTCTTTTCCATCTACTTCGGCGCAGCGCTC  
GGATTCAGCATTCTCCTATTAGTTGGATGGTGGAGTTTGAGGCGGAATCCAACCTTTGGT  
TTACAC

>RXA02519-downstream  
TGATCAACTGTGACTACTGATTT

>RXA02520-upstream  
TTTGCGCTGGTAGGGGGGAAGGGATTGGACACGGGAATGGAATTAGGGAACACTTGTGTT  
GTCTAAAGGTGAAAGCTAAATCAAGCAGGAGGTGACACCA

>RXA02520  
GTGGGAGATGTTGTAAAAGGCAACGACGCGCACACCGGAGACGGTGATACGCGCCGAAAA  
ATTCTTCTCATCTGTGGAACGTGCACCGGTGATCGCTTCAGATATTGCTGAACAGCTT  
CAGCTTTCAACTGTGGGAGTGCGCAGGCACCTAGACAACCTGGTTGAAGAAAACTTGGCG  
GAGGCGGCAAATCCGCGGCCAGAACCCATATGAGCCCAAATGCGCGGTAGGCCAGCAAAA  
ACTTATCGGCTTACTGATAAAGGTCGCTCAATCTTCGGCCACGAATATGATTCCCTTGCT  
GCGGCAGCTCTAGCCACTCTTCGAGAGGTGCGCGGAGATGATGCAGTAAGGCAATTTGCT  
AGAAAGCGGATCGAAACAATTGTTGAGGGTATTACCCAGCAGATGTCACAGATCAATCA  
ATCGAAGATACAGCCAAATCTTTAGTTGAAGCTTTTAGTCGGCATGGTTATGCAGCAACT  
GTGATGCCACTCGAAACGGGTTGCAACTCTGCCAGCATCACTGTCCAATATCTACAGTC  
GCCACGGAATTTCCGGAACGTGTGAGGCAGAGCATCAAGCAGTCTCAGAACTTTTGGGG  
CAGCACACGCAACCATTTGGCAACAATCGCGGACGGCCACGGCATCTGCACAACAAATATT  
GCATTGACACCCATCAAACACTCC

>RXA02520-downstream  
TGATGAAAGGAGCGGATCATGAC

>RXA02521-upstream  
GCACACGCAACCATTTGGCAACAATCGCGGACGGCCACGGCATCTGCACAACAAATATTGC  
ATTGACACCCATCAAACACTCCTGATGAAAGGAGCGGATC

>RXA02521  
ATGACTTCGGCAACGACGAACCCAGGGGTAAACGAGCCCTTGACCGATGACCAGATCATT  
GAATCCATCGGTCCGTACAACATATGGTTGGCACGACTCCGACGACGCTGGTGCATCCGCA  
CAGCGTGGTCTCAGCGAGGATGTCTGACGCGACATCTCTGCGAAGAAGAGCGAGCCAGAA  
TGGATGCTTCAGCAGCGCCTCAAGGCCCTGAGCATTTTGTATAAGAAGCCAGTTCCAACC  
TGGGGTGCAGACCTTTCAGGCATTGACTTCGACAACATTAAATACTTCGTCGCTCCACT  
GAGAAGCAGGCACAGTCTTGGGAGGATCTCCCAGAAGACATCAAGAATACCTACGACAAG  
CTGGGTATTCTTGAGGCCGAGAAGCAGCGCCTCGTTGCAGGTGTTGCAGCTCAGTACGAG  
TCTGAGGTTGTCTACCACCAGATCCGCGAGGACCTGGAGGAAAAGGGAGTTATCTTCCTT  
GACACCGATACCGCACTGAAAGAGCACCTTGAGATCTTCCAGGAGTACTTCGGCACCGTC  
ATTCCAGCAGGCGACAACAAGTTCTCCGCACTGAACTCCGCTGTCTGGTCCGGTGGATCT  
TTCATCTACGTGCCAAAGGGTGTCCACGTGGACATTCCTCTGCAGGCTTACTTCCGCATC  
AACACCGAGAACATGGGTCTGATTCGAACGCACCTGATCATCGTTGATGAGGATGCCTAC  
GTTCACTACGTTGAGGGCTGTACCGCACCTATTTACAAGTCCGACTCCCTGCACTCCGCA  
GTGCTTGAGATCATCGTGAAGAAGGGTGGACGCTGCCGCTACACCACCATTCAGAACTGG  
TCCAACAACGTCTACAACCTGGTGACCAAGCGACCAAGGTTGAAGAGGGCGGCACCATG  
GAATGGGTGATGGCAACATCGGCTCCAAGGTCACCATGAAGTACCCAGCTGTCTGGATG  
ACTGGCCACACGCAAGGGCGAAGTTCTCTCCGTCGCTTTCGAGGTGAGGGACAGTTC  
CAGGACACCGGCGCCAAGATGACCCACATGGCTCCTTACACTTCCTCCAACATCGTGTCC  
AAGTCTGTGGCACGTTGGCGGTGGACGTGCGGCTTACCGTGGTCTGGTTTCAAGATCAACGCA

AACGCTCACCCTCAACCTCCAACGTTGAGTGTGACGCACTGCTGGTCGATGACATCTCC  
CGTTCTGACACCTACCCATACAACGACATCCGTAACGATCACGTGTCACTCGGCCACGAG  
GCAACTGTTTCCCAGGTTTCTGAAGAGCAGCTGTTCTACCTCATGAGCCGCGGACTTGCG  
GAAGAAGAAGCAATGGCAATGATCGTTTCGTGGCTTCGTTGAGCCAATCGCTAAGGAACTC  
CCAATGGAGTACGCCCTTGAGCTCAACCGACTGATCGAACTGCAGATGGAAGGATCGGTG  
GGC

>RXA02521-downstream  
TAAGCCCAATGACTGAAGTAGCA

>RXA02524-upstream  
GACGCGATCAGGCGCTCCTACGCACCCAGGCAATTAGGCCTGAGCTTATCGACGCATCCC  
TCCTCGATTCCACCGACCTCAAAGTATTGGGACTGGACAA

>RXA02524  
ATGACAGAGACCACCTCAACCCCCAAAGCCAGAGCCCGAGCTCCCGAAATTTCTCAGC  
AACCCAGAACGCGCCGACATCATTTTGTTCATCGCACTCATTGTGATGGGCATTTTCTCC  
CTCTGCATGATCCCACTGCGCGCCTGGATGCTCACCACCTCTGGCCTACACCCTCATC  
GTCGGTGGTTACACCAGTGCAGTCGTGGGCGGCGCGAACGCTTCGGTAGAAAACGGCATC  
TGGTGGGTCTACTGGCTCTGCACCCCTGATCGGCGCGCTGAAGTTCATGCCCGTCTATTGG  
CTGATGGGTAAAGCGCTGGGGCATGGAATTTATCGACATGTCCCTCCAATACATGCCCCGAA  
TTCCACCGCATGTTCAAAAAATCCGTCGACTCCGAATCCACCCGCCTCTACGCCTGGATC  
ATCGGCCTCATTCCACTCGCATACCTCCAGGACCAGTGCCGGGAACCATCCTTAACGCA  
GTGGCTGGGCTGGTGAAAATCCCTTCTGGATCATCATGGCCTGGAATGCGATCTGCGTA  
CTATCGGTCAACGGACTATTTCATGTGGCTGGGATACACCTTCGGCGAACAAGTCTCGAC  
ATCGTCAACGTGGTCAACCGCTACATGCTTTGGATAACCTTAGGATTGCTGGCGCTGATG  
TTTTTCCGCGCACGGAAGCAATTTGCCAAG

>RXA02524-downstream  
TAAATGGTTGAAAGGAATATGAC

>RXA02525-upstream  
CGTGGTCAACCGCTACATGCTTTGGATAACCTTAGGATTGCTGGCGCTGATGTTTTTCCG  
CGCACGGAAGCAATTTGCCAAGTAAATGGTTGAAAGGAAT

>RXA02525  
ATGACCACCATGCGAGAAGTTTCAACCGACCTCAACATCCTCATCGTCCCCAGCGAATGG  
GAAAAAGTACTAGAAAACCTACCAGCGACATTGAGTGAGTCCGGATTTCGTAGCCTCTGAA  
ATCCACTCCCAGATCGTCGACCTCACCTGCGAACCCGACAACATGCTTGTCACCCAGTTC  
TCCAGCTAGAGGGCCACCCACCAATTGTGGAAGTGCTCCACCGCCTAGTAATTAACGGC  
TCCTCCGACCTGGAGCTTAAAGACCTACCAAAAAGGTGGTGGGGGCGTTGCCTCAGGGG  
ACCTACTGGTATGGAACCTCCCTTGAAGGTGCGACCGAACCTGGCGTTAACGCATCATGC  
GCGTGGCAGCATCGGGG

>RXA02525-downstream  
TAGTTTTCCGCGTTTAGTCAGTT

>RXA02534-upstream  
TTACCAGTAATCTATGCAGATTTACTGTCCGTTGGGGATCCGCGCCTATCGGAAGTTGCC  
TACATTATAAAAACCTCAGATTCAGGAATACACAGACCATG

>RXA02534  
ATGAATTCACCGAACGCGGACATTATTTTAGTAGTTAACAAGCTGTCCAAGTTTATTGAT  
ATCGAAAAATATTATGCTCGTTGGAGCACGATGTAGAGACATTACCAGCAAAAAATATCGC  
GATCAAACAGCGGGTAGAAGAACTAAGGATGTTGACTTCGCTTTAGCTTTAGAAAGCTGG  
GACGACTTCAATCTATTAAAGCAACAATTCTCACCGACTGGTAACGCATGGCAAGGAATC  
ACCATTTGGAATATTCAGTAGATCTCGTGCCATTTCGGAATATTGAAAACCCACCCGGT  
GAAGTCTTGTCAGAAAAGGTCTACTTAATGTCGCTGGGTTCAAGGAAGTATTCGAG  
CAAGCTGAGCTATATCCCTAAATGATGCGATAGACATTAAGTTGTCTACAGTCCCCGA

CTTACTGCGCTAAAGCTACATGCATGGCTCGACCGTAAAGAAAAATAACATCAAAGATGCA  
AGCGATCTAGCATTAATCTTGTCTGGTACGAAGAGGATGTAGAAACTTTATGGAATCGC  
TATTTTGCCCTGGAAAAATCAAGGATACATAGGTGAACCAGAGGCAATGGCAGCTGAATTA  
CTAGGACTTGACACTGGAAGAATACTCGGCCACAAGGAACTCAAGCCCTCCTTGATCGA  
TTTAATGAACAGTCTCCTCCTGAGCTAAACCAATTTGCTGAATCACTTGAAGCCCCCTCT  
GAACACAGTCACCCATTAGAACGGCGTCGTATCCAGGTCGAGGCACTGTTAGGTGGACTT  
AGAGATTCCCTCGGTTACGATGAA

>RXA02534-downstream  
TAGCTTCCAATCCCGCATGTTC

>RXA02537-upstream  
ACCTCCATCTCAACAATCATCTTTCCGATATGCGCACTGTCAGCGAGCAGATGCTCAACA  
TAGACGTCGATCTTGCCACACACTGAATAAGTTGCACTG

>RXA02537  
ATGCTCGCCCTCAAAAGTTTCAAGATTAGAAGGCATAGCCACATCACTCACCGCCGTGGCG  
GGTGGCTCCACGAATCAAACTGACCGGTTGCACTGCTGGCAGCAGCTCGAAACGATG  
ACCTCTGCCAGCTCCCTTATCCAGGGCTTTATCAAGCTTGTGCGATTACAACCGACCCACA  
GTGAATATCGTGGAACAAAATGCACAAAACCGCATCCACGCTTTTCAACACCGCTGATTTT  
CTACGCACTTTGGAAGGCTATGTTGATGTACTGGAACAAAACCGGATAAATCTATAACG  
CTCACCGTCATGCTTCGATATATTGCCAGCTTGAGTAGCCTTTTAGACCTCATGTGTGCA  
CGCGAGATCAACGCGTTGTGCACAGCGATTACTCCAGAACCATTGAAGCATCTGGGCGAT  
TTTGGCACTCTACCGCTCAGCAATCCACGAGTTTCATTTGG

>RXA02537-downstream  
TGAATGCCCCACCAGAAATCCGT

>RXA02538-upstream  
GCGAGATCAACGCGTTGTGCACAGCGATTACTCCAGAACCATTGAAGCATCTGGGCGATT  
TTGGCACTCTACCGCTCAGCAATCCACGAGTTTCATTTG

>RXA02538  
GTGAATGCCCCACCAGAAATCCGTGCCTTAGCCGAAGCCCATCCCGATATGCAGATCCTA  
GAAGCCGCGCATGGTTTCAATTGGTAGCATCGTTTGGGGATATTGATAGGGCTACGACCGTG  
ACCACCATCGTGCCAGGTGTGGGTTCCTCCAACCCAGAAAGGGTGAATACATATGTTGAC  
CGTGCCCGCACAGTATCTGCTTCCACCGGTTCCGCAACGGTGTGTTGGCTGGGATATCAA  
GCACCCGCTTCGATTCTGCTGCGGTATCCGGCGCGGCAGCGAATCGCGCTGCCGCGGAT  
CTCCAGAGGTTTCAAGCGGCATACAGTCCCGCAATCCCCACCAAAGAAAAGTAGTGATG  
GGCTACAGCTACGGTTCCACAGTGGTGGGAAAAGCTGCGTCTTCCGGCGAGCTCAGTGCC  
GATGCGTTGGTATTGGTTGGCAGTCCCGCGCGGGTGTCTCGCACTCTTCCCAGCTTGGC  
GCACCTGTGTATGCGGTAACAGGGTCTGCTGATCCCATCGGTTTGGCCGGCACCCAATAT  
GACGGCATCCACGGCACTGATCCCACCGCTGCCCTATTCGGTGCAACAGTGTGGGATTTC  
CCCTCAACGCATTCCGGTTATTGGAATGACCAGGAGTTCTTGGGCAATGTGGCGGAGGTG  
GTTTCGCGGCAAA

>RXA02538-downstream  
TAGAAAAGCCGCCGCACACTGGA

>RXA02540-upstream  
GCATATGCTGAAGCAGAACTAATTCAGGTTTTGATCCCCGCGCTAACTGGGCGGGCCAG  
AACCGCTAGACGTTCTCTTTGAGAAAGGAGGTGACGAAAC

>RXA02540  
ATGGCATCCACACCGAAAAAATCCAACGATGAAGGTCAGTTTGACCGTGTGATTTTCAA  
GGGGAAGTCTTCGTTATCTCTGTGCGAGCCGAGCTTGCCGGCATGCATGCCCAAACCTTG  
CGAACCTACGATCGCATGGGTTTGGTCAACCCGATACGCACTCGCGGAGGCGGTGCGCGT  
TACTCCCGCGCTGACGTGGAATTACTCCGAGAAATTCAGCACCTCAGCCAGGAGGAAGGC

GTAAACCTCGCCGGAATCAAGGCGATCATCGAGCTCGGCGAAGAAAACCGAAACCTCAAA  
GAATCCCTGCGTAAGGTCACAGCTGAGAATGAGCAGCTCAAAGATCAATTACGCAGCGGG  
CGTCCGCGTGGCGAGCTGGTGCACGTGCCCCGCTCCACCGCGGTGGTCATGTGGGAACGC  
CGCAAGGGGCGTTCCAAG

>RXA02540-downstream  
TAAAAACATGCTTGTTCGACGCCA

>RXA02544-upstream  
CCAATCAGGGAAGATAAGAGCTGTTTTCAACAGGTCCCACTCAACTTTGACACCAAGTCT  
CACGCAAAATTAACAGCCATAAACTTTAGAAGGACACCCT

>RXA02544  
GTGTCCACACCTGTGGCATAGTGATTTTTGTGAGCACAGAATCAGGAAACACCCCAAAA  
AGGGATGATGCAAAAAGCACCATCCCTCCGAAAGATTTGCCTGACACCGTCTTAGACGCG  
ATTGAAGGCAATTTTGAGCCACCGCTAAATACCCAGAAGTCGGCGGTTCCCCCTAATGCC  
GAAGCAACTGTGCGAGGCTGATTTCTGAAGGAACTACCGACCGCTCTGTCAATTTGGGCAGG  
GACGGCCGCTGGCTGTCCGGATGGGCATTGCGCTTCATCGTGCTGGTTATCGCCGGCGCTC  
ATTGCACTTCGTATGCTGGGCTTCATCTGGGTTGGCATCCTCCCAGTCGTCTTCGCACTT  
CTAGTCTGCACCGTGCTATGGCCACAGTGAAATGGCTGCGCGAGCATAAGATTCCACAG  
GCGCTCGCCGTTGTTCATCACAATTTTGGGTTTCTTCGCCCTCATCGGCGGAGTTTTTGCA  
GCCATCGCGCCAAGCGTGTCTTCCAGACAAAGCAAGTGGTAGACCAAGCAACTGTTGGT  
ATCGAAGATCTAATGGATTGGGTTTCAAGGCCCCACCTTTTAACTTAGATATCTCACAGTTT  
GAAGGCGCGCTCAATGACCTAACATCCATGCTGCAATCACAGTCTTCCACCATTGCTTCT  
GGTGTGTTCTCTGGACTGTCAACGGCATCATCCATCGTTGTACAC'TAGCAGTGATGCTG  
GTGTTGACCTTCTTCTTCCCTCAAAGACGGTCTCTCGTTTCTTGCCATGGATGCGCGGCTTC  
ACTGGTGAAGACGAGGTTGGCACCTCACAGAAGTCTTGACCCGTACCTGGAATACCTTG  
GCCGATTTCATCCGTGCTCAGGCATTGGTGTCATGTTGACGCAATATTTCATTGGTATC  
GGATTGCTGCTTCTTGGCGTCCCAATGGCCCTCGCGCTCGCGGTCATCACATTCTTCGCG  
GGCTTCATCCCCATCGTCGGTGCGGTGTCTGCAGGCGCCCTGGCTGTTCATCATCGCGCTA  
GTTACCAACGGCGTGACCAATGCGCTTTTGGTACTTGTATTGATCCTGGCGGTTTACGAG  
ATCGAGGGCAATATCTTGTCCCCATTCTGTCAGTCCAAGGCTATGAACCTGCACGCAGCG  
GTTGTTTTGCTATCCGTCACCGTCGGCTCCACCATGTTTCGGCATCATCGGCGCATTTCTTG  
GCTGTTCCAGTAGCCGCGACGTTGGCTGTCTGGGTGCGCTACCAC'TCTGAAATGGTTGCT  
TTGCGCGCCGGTGAGATCACAGTGATGACATTGAGATCGCCACGACGAAAGGTTCCCCA  
ACCAGCTCAATGGCCAAGAAACCCTTGCTGCCATTCGAAGCAGATTTCGCCATCCTTGGC  
CGCAAGAAGCCGACATCTGCCACTGCAGAAAAAGCAGACTCAGAAAGC

>RXA02544-downstream  
TAGCCAATAATGCTCACTCCCGA

>RXA02545-upstream  
AAGAAATCGAGAAAGTAATTCGTGGGTGAAGTTGTTTCAGAGTTGTTTTTTATTAAACAA  
CTCAGCCTGTAACCTCTTGGTCGTTCTATGCTTGGTCACC

>RXA02545  
ATGACTGAGACTCTTTTTGTATCCGCCACAAC'TAGGGAAGCGGTGTATCTTCCAGATGGA  
ATCGACTTGCTGGTGACTGGCATCGGAACGACCGCAGCAACGATGATTTTGA'CTAAGGAG  
TTGGCTACTCGGGAGGTGCTTCCCTGCCCGAATTGTCAATATTGGTACGGCGGGAGCTTTG  
GTGGATGGATTGGCTGGCGTATACGAGATCGAATACGTTCTGCAGCATGATTTTCAGTAGC  
GAGTTAATCGCTGAAATGACAGGAAAGCCATGCTCAAA'TGGTTCAACTTTGGCCACGAGT  
GGGCACTTCCCAGTAGCGAGTTTGGCAACAGGAAACTCATTTAT'TGCAGATT'CAGAAACC  
CGCAACCACCTGGCCACCCGGGCCCTCCCTCTGCGATATGGAGGGCGGGCGCTGGTGGGC  
GTGCAAAAGCATTTTGGTGTTCCGATTACGCTGCTGAAGCAGGTTAGTGACAGCGCGGAT  
GAGGAGGCTTCCGGGTCGTGGTTTGTATGCGGTCGATGCGGGCGCACGACAGTTGGCGGAG  
GCTGTGAAGGAGTTTAAA

>RXA02545-downstream  
TAACAAAAACCCGATGCCTGGCG

>RXA02546-upstream

GATTATGTCGGCTCCACCATCGTGGTCAGCTACACCGAAAAACCAAACGCCAGGGCGCA  
ATTCAGGGCAATTCAGTTTCTCTAGGATCGAGAAATAAC

>RXA02546

ATGCCATTGTTTATCGACGACGCCCTCCACCGCAGCAAAAAATACTTCCACGCGCACTTA  
AGCGAGCTGCTCCTCGGCGAATTTGCAGGCCTCAGCCTGCCCTGCACCCACCGACGGCA  
GCTAAAGCCGCCGCCGATATTGATGCCACGAGGGAATTTATCCGCCAATGGGAGGGGCGT  
GATGATGTGGAATATGCCATTTCGAAACTGGTCTCCTGTGGGCTTAGGTAAACTGAAGTA  
CCCGTTAGGCTGACGTTGAACACGACTGAGGAATTAGTTGTGTTTGCAGGAGGTAGAGGAT  
GAATGGTCTTCACTTCACGAGAGGTTTTCACAGCTGTCTGGTTTTACAGCGGAGGTGGTG  
GCGAAACATGTGTCGCTGTGGCGTTTCGCTGTCTAACGATGATCTCTCTAAGGCAGTGTTA  
GTTGTGGATTGGTTTTGAACACCCCTAACTCTGGCCTGTGAAACGCGCCGTCGCAGTT  
GAAGGCGTGCATACCAAATGGCTCGAAACACCGCGTACTCATTGAAACGTTAGTGGCC  
GACAAACGTGGTGAACCTGGTCTGTCGGATCTTGGACTGGTGACGCCGAAGCTCGCGTC  
CGGCTCCGCTTCCATTCCGTAGATGCTCCCGCTGGGCTCACAGACATTGAAGTACCGCTT  
TCCAACCTGTGTGAATTACAAGAACCGCAAGTAATTCTGATGGTGGAAAACCTCGATTCA  
TTTCTCGCTTTACCCACTTGGCCGGGCGTAACAATTGCTTGGGGTGCGGGCTACCGTGCA  
GTAGACATTGTCGAGGACCTTACTTTCTAATGGTCGGTTGCTGTACTGGGGTGACCTT  
GACCTGGACGGTTTCAAAATTCGACGGCGTCCGCAGCCATGTTCCCTCACACCGAATCC  
GTGCTGATGAACTCTGAAACCGTCTCCCGCTGGCGCTACCTTGGCGTTGCCGACCGAGAA  
TTCAAGGCAGAGAGCTTTGACAACCTTCATGATTTTGAATCTGACGCACTTGACCTACTC  
ATTACAGACGGTGAGCTCCGCATTGAACAAGAACGCATCCGCCTCGATGTTGCTGTTGAA  
GAAATCGAGAAAGTAATTCGTGGG

>RXA02546-downstream

TGAAGTTGTTTCAGAGTTGTTTT

>RXA02549

ACCCTCACTGCAATCTCCTCCGAAACTTGGCCTATCATGCTCGCGCCATGGGTATGTCTG  
CCTCTGCTTTCGCGAAATGTGGATGCACGGGCCATCGCGTGTCTTACTTCCCGCGGCA  
TGCATGGGTGCAGTTAATGCCACCGCCACGATGGCAGCACTCATCCCGGCAGCGCTGATC  
TTGCTGTATAGAGGGCTCTTCTTAAGGCTGCTTCTGTGGGGAATGGGCGTTCTCGCTGTT  
AATTTCATGGTGGATCGGACCTTTGTTGGTGCTTGGCAAATACGCCCCGCCCTTACCGAA  
TTCATCGAAAGTTCCCTCCGTACCACTTCTGGCTCAACCCAGTAGAAATACTCCGCGGA  
ACCACCAGTTGGACACCCCTTCGTAGACACTGAACGACAAGCCGGATATCTCCTGGTCAAC  
GATGCTCTCTTTGTCACCCCTCAGCGTTCTCGTCGACGCCCTCGGCTTGATCGGCCTCACC  
TTGATGAAACACCGTGGACTGTGGGCATTTCATGCTGGCCATCGGACTCCTCATCCTCGGC  
AGCGCCACCTAACGGCTGTTCAAGAATTCTTCGACGGCCAGGCGCAGCACTTCGAAAC  
ATCCACAAATTTGATCTATTAGTCCGCATGCCGTTGATGGTGGGCGTTGCCGCATTGGGG  
TCGCATATCAGTCTGCCCTTGCTTGGGACGACTGCATTGACCAGCGGACAAGGCAAACAC  
CACACCATCCCGCTGCCCTTCCAAAAACGCCAAGCCGACGACTCCTCGTGGTGATCATC  
GCTGTCCGGTGCTCTTGCTCCCGCATGGTCGGCACGGCTGCTACCTCAGGGAACGTGGGAT  
GAAGTGCCCTGACTACTGGTACGAAGCCACAGAATTCTCAACCAAAACGCCACAGGCACC  
CGCACGTTGATTTGGCCTAGCTCGCCGTTTGCCCGCCAGGACTGGGGATGGACTCGGGAT  
GAACCAGCTCAACCACTTCTTGATGTTCCGTGGGCTGTCCGCGATGCCATTCTTTGGTT  
CCCCCGGAGGCGATTTCGCGGATTAGATGGTCTCGACGACCTAGGCACTCTAGGCACCGGT  
CTAAACGACGAGGCTTTAAAACGTCTAGGCATCGGCGCAGTACTGGTGAGGCATGATCTG  
GAAGCCGACCCAGATATTGAGGTGGATCTGCCTGGGGAAAAGCACACTTTTGGCTCCCAA  
GGCCAAGTAGACGTCACCTCACCGACCCCGACCGCAATATGTGGATCACTTCCGGCACA  
TCCAAGCAGCTGCCCACCGTCGCTGGCGGGCGGCAAAATCCTCTCGCTCCTAGACACCATC  
AACGGC

>RXA02552-upstream

TCCTTAAATACCCACTGTCTCTATTCTGGGTTAGGCTTCACTGGGTAAAAGTGCCTGCC  
TATGCCTGAAACTTGAGCATGGCAACAGCAAGGAGACACC

>RXA02552

GTGGGAAAACATGCAGCTGAAACATCGGAACCGAAGAAAAATTCACCGTGGCGCATTGGT  
TTGTTGACGTTTTTGTATTTCTTCAGTTGTGCTGACGCTGGTGGGCATGGTGATGCTGTGG  
CCGATTCTGATGATGTGGTGTGGCGGATAACTTTTCGACGACGTTTGGCGGAAATCAT  
GAGCAGGTGGATGGAACGATCACGCTCGTTGATAATTCTGCGTGTAAATCGCCAGACACC  
GGCCGAGTTTTTTCGCGAAAGCCCCACGATTTCTGCGGAGCCGCAACGTTGGAGTGCGTG  
CGTGCACTCGTAGACATCACATCGGGTGCCAATGAGGGGCAGAAAACTCAGCTGATCACT  
TACGCGCAACCTGGTGATCCGGAGTTTTCCGAGGGCGACAAGATCCGCATGGTGGAACA  
CCGATACAAATGGCGAGATCATCTACACCTTTGCTGATTACCAGCGCGGACCGGCGTTG  
ATCATTTGGGGTGTGGTTCCTCATTTGTGGCGATGGGAGCTTTTCGCGCGCTGGCGAGGTGTG  
CGTGCGCTGGTTGGTTTGGTTCGTACCTTGGGAATTGTTGGTATTTTCTTGCTGCCAGGA  
TTGGCCAGCGGGCACGATGCGATGTGGTTGGCGCTGGTGTGTGGCGCGGCGATCTTGTGTG  
ATTGTGGTGCCGATGGTTCACGGAATCAACTGGAAATCGGCAGCTGCGTTGGCGGGCACG  
CTGGTGGCATTGTTGTGTCGGCGGTGTTGTGCTGGGCGTCGATCGTCACCACTGAATTT  
CGCGGACTGGGCGA

>RXA02552-downstream

TGAGAATCATCTGAAGATCATCA

>RXA02554-upstream

GCTTTTGAAGTGTGTCGCGTGTGCGGACTGAAATAGTTTCCGCTTCAACTTGGTTGCTAA  
GGATAGGCTCCATAAAAAATAACCAAGGCGGAAAATTTCA

>RXA02554

ATGTCACACACTAAGCCATCCATTGCCATCCTCGGTGCTGGCCGAGTGGGTTCTTCACTT  
GCCAGGTTCAGCGGTTCGCCGACGGCTATGAGGTAAAGGTTGCTGGTTCAGGTGCTGTGGAC  
AAAATCGCTCTTACCGCTGAGATCCTTATGCCCCGGCGCGGTTCCAAGCACTGCTGACCAG  
GCTGTAAAGGATGCAGATATTGTGTTCTTGGCTGTTCCCTGCATAAATTCCGCAGTGTC  
AATCCAGCCACTTTAGAGGGCAAGATCGTTATTGACACGATGAACCACTGGGTTCCGGTC  
AATGGTGAGTTGGAGGAAATTGATCAGGATCCGCGCAGCACTTCGGAGATTATTGCGGAG  
TTTTTCGCGGGATCAACCATGGTGAAGTCTTTTAACCACATTGGTTATCACGAGATTGAG  
CAGGATGCGGGTACCGGGCGTGCATTTGCGTATGCCACGGATGATGTGGATGCAGGTGCC  
CAGGTTGCACAGCTAATTAAGAGTTTTGGGTTTGTTCCTTTAAATATTGGCGCATTGGAA  
AACGGCCGTATTCTGGAACCTGGCCAAGAAGCTTTTCGGCGCGCACCTTAATAAAGATTTCG  
CGCCTAGAACTTGTTAATCAGCGG

>RXA02554-downstream

TAGTACCTCGATCTTCAGCCAAC

>RXA02555-upstream

GTTTTATCGCTATTTAATACAGGCCTACCCCCACTACCCCCATTTCAGTTCAGGGAATCCC  
CGGATTTAAACAATTAATAACCTCTAGAATGAGACATT

>RXA02555

ATGGGCGAACAATTTCCAGGCGATAAAAACATCCGAGTCAGCGACACCGAAAGATCAGCA  
GCACTAGCAGCACTCGGCCAGTTCTACGCAGAAGGTCGCTCTCCCTAGAAGAAACCGAC  
GACCGCTGCGAAGCCGTCGCCGACGCCAAAACCCGCGGCGACCTCAACGCCATCTTCTAC  
GATCTGCCCCAACCAACAAATCGCAGTCGTCGACCGCTCCGAACAAACCTACACAGCCACC  
GAAGTTGCCGAACCTCACCGCAAAGGCGCACGCCCCACGCGCCGAATCCTCGGACTCACC  
ACAGTTTTAGCCATCACCGGTACCGCTGCTTTTCGCCAGCACACAGCTTTTGAACAGTA  
CTTTTAGCCCTGATTCCGATCGTGTTCATCATGCTGTACGTGATGAAAATTGGTCCTGAA  
TCCTGGCACGCACCAACACCTCGCCAACCTTCAGCGAAAAGCGCATGATCGAACTGCGTGAA  
AAGGAAAAACTCCGCGACATGGAGCTCAAAGCCCAGCGCAAGGAACGCACCCACGCATTA  
ACCAACCGCGCGTTGGATGCTGCTGAAACTGCTTTCAACACCAAGCCCTGGAAGAAGAAC  
AAA

>RXA02555-downstream

TAGGGCTTTTGAAGTGTGTCGCG

>RXA02564-upstream

ACACCACAGTGAAGCGGTGACGTGAATCACCCAAGCACTTAGGCATCAAACATTCAAGAG  
CTTGTGTGCCAAAAGTCCGACCGAGAGGGATTCCCCCAA

>RXA02564

ATGGCCGAAGTAGGAGCAGAACCCGCAGGGTCTGCACAATCCAAAACATAACAATTTGTT  
GTAGGTACCGCAGCGGTGGTCATCACTGCAATCGCTGCGTTTCTCCATCCAGTCTGCA  
TCCGGTGGCGAGGATATTCTGTTCCAACATGACGCTGATTGCTCCTGCAGCTGCAGGTGGA  
GGTTGGGATACTTTCCAACGTGAGCAGCAGCAGTCTATGCGCGTGAATAAGATCGTGAAC  
AATATTCAAGTGGTCAACATCCCTGGAGCTGGTGGAAACCATTGCACTTGGCAAACCTGTCT  
ACCATGACTGCACCGAACCTTGATGGTGGGTGGAACGGGGCATATCGCAGCACAAATT  
CAATTCGATACCCCTGCGAAAATCCAGGATGTACCCCAATTGCTCGTGTGGTGGAAAGAG  
TTCGACATCATCACCGTGCCAGCGGATTCTCCATACAACACCCCTTGAAGAGCTCATTTGAA  
GGTTGGAAGGCAGATCCAGCAGGAGTGTCTGGACCGGTGGTGGTTCCCTTTGACCAGCTT  
GTTATGACAGAAATTGCACTGTCTGCAGGTATAGATCCTAAGCAAACCACCTTTATTCCT  
TCTGATGGTGGTGGCGAAGCGATTTCAGGCGCTACTGAACGGAACCGCAAAGGCATCAACT  
GGTGGTTTTGCTGAT

>RXA02568

ATCCCGGCAGCACCTAGTGCCCCAGGCAGTGAATTCCAACACCAGGCACAGCAATCCCT  
GTGCCTGGAAGTGCAACTCCTGTCCCAGCACCTGGGGTTAGTGACCTGGCGCAAGCGTT  
CCAAGCATTCAGTACCAGGATCTGTACCCCCACCTGCACCAGGAATTTCCGCACCTGGC  
GGTGCACCTCCGACTCCTGGCAGTGCGCCCCCAACACCTGGCGGTGCCCTTCCGACTCCA  
GGTGAGGCACCTTCCCGTTCCCGGAGCACCTGGTGCACCCGGAGCATCCGGAATCCCAAGT  
CCTGGCCTTCCAACCCCAGGTGTCCCAACTCCCGGAGCTTCCCTTACCAGTCCCAGGAGCA  
CCAGACGCACCTGGAACCCCAAGCATTCCCGCAGCTCCCGGCATTCAAGCACCAGGAATT  
CCAGCAGCACCCAGGAGCCCTGCCCAAGCTGCTGCTCACGCAAAGCCAGTATTCCAAGAT  
GCAGAGAAACGACCTCGCACAGATGAAGCTGGAATGCGAAGAAGGAACGCGCTGAGA  
GTTCCGGTTGGCGCAGCCAATTACACGTAAGCAGTGGGCAATGACTCTTGGTGTCTCGTT  
CTCGGAGCAATTGTCGTGGCTGCAATCGCGGTGGTCCCTTGCCAAATGGGCGTTTACCACG  
GAGTGGTTGCAGGACTTCGTGAGAAAGTATCCGGGTAAATATGACAACCCCGAAGGTGCG  
CCAGTAGGAATTCCAACGTGGCTGAGTTGGCAGCACTTCTTCAACATGTTCTTCATGGTG  
TTGATTATCAAGACGGGCATTGAGATCAATAGAACCCGAGGCCAAAGGGTTATTGGACG  
CCGAAAAGGGTGGCAAGAAGATCTCCTTGACGTTGTGGATCCACCTGGTTTTGGATTG  
TTGTGGATCATCAACGGTGGCGGTGTTTCATCATTTTGTGTTTCGCGACGGGTCAAGTGGATG  
CGCATTTGTTCCAACCAAGTTGGGATGTGTTCCCGAACGCGCTGAGTGCTGGTTTTGCAGTAT  
GTGTCGTTGGATTGGCCGACTGAGAATGGTTGGGCGAATTACAACAGTTTGCAGGAGCTG  
ACGTACTTCTTCACTGTCTTTATTGCGGCACCGTTGTGCGATTGTGTCTGGTTTTCCGGATG  
TCGAGTTACTGGCCTAAGAACAATGCGACGATGAATAAGTTGATCCCCATCGGGTTTGCT  
CGTGCGCTGCACATGCCAGTGATGGTGTATTACATCGTGTTCATTTGTATCCACGTGTTT  
TTGGTGTGGCGACCGGCGCGTTGCGCAATTTCAACCATATGTATGCAGGTCAAGACGTT  
GTGAACCTGGGTGGTTTTGGTTGGTTTCGTGGCGTCGTTG

>RXA02569-upstream

AATCTTCAAATCGTTCCCGCAAGCAAAAGGTGACATACTGCTGGCTTGTTTTTGCATTG  
ACGATCTGCATGGGGATTACT

>RXA02569

ATGTCACGCTCATCTAAAATTTTCGGTCGCGTTTGGTGGCCTACTCATCGCTGCTACCTGG  
CTGTATTTGGTCTTGGTCAGGCCTACCGATTGGGAATCAGTGGGTGGTTCCACGGAAGCG  
TTGATCAGCTTGGTGGGTATGTTGCCGGCAGCATCGCGTTGTTGGTTGGTGTGCTGCCT  
ACGCTTCCAGCCAGGACCATTCGATCATTCCTGTGGCTTTGGTGTCTCAATATTTTGTTA  
GGCCAAGTCACTGGTTCTTTTGTCAATCCGCTGTATTTAGATGCGGTGGGCACAGTGCTG  
GTGCGAGCTCTTGTGCTCCTAGTGTGGTTTGGCAACAGGTGCTTTAAGTTCTGTGGTG  
TGGGCGTTGTTCAATCCGCTGGCTTTGCCGTTTGCTGCAGGTTCGCGCTGACTGGTTGG  
TTGACCGGTGTGGTGATTAAAAAGGGTGCCTTTAAGAATATCTTCGCCACCATCATCTCT  
GGTGCGGTCAATGGTTTTGATCACGGGTGCTGTGCGTGCCTCGGTTGCGGCGTTTGTATT  
GGCGGAACCGCCGGTGTGGGAACCTGGTGCGGTGGTTAGCCTCTTCCGCGAAATGGGTAAC



TCTTTGCTCGCATCGGTAACCTGGCAGTCGTTTATTTCCGATCCTTTGGATAAGGCCATT  
GTTATGCTCATTGTGTTTGTGGTGGTCAAGTCGCTACCCAAGCGCACCCTAGGGCATTG  
GTTCCGAGCGGGTTCCGGAGGACGTCGCT

>RXA02569-downstream  
TAAACATGAATCCTTTGACATGG

>RXA02570-upstream  
CCATTGTTATGCTCATTGTGTTTGTGGTGGTCAAGTCGCTACCCAAGCGCACCCTAGGG  
CATTGGTTCCGAGCGGGTTCCGGAGGACGTCGCTTAAAC

>RXA02570  
ATGAATCCTTTGACATGGATCATTGGCGCATTTCAGCATGTGGATCGTGGTGCTGGGCGTT  
AATAAGCTTGGTTTAAAGCATCGCAGTGATCATCATCGCGCAGGTCGTGGCGATGATTCGG  
GTGCGCAATGTATCTGTGTTGGCTTCAACAGCATTGTTATCGGTTCCCTGCATTGGCCTCG  
ATGGCGCTGATTCACATGCCGATTCTTCCGACGGCTGGTTGATTGCTCTTACCTTGACG  
GCTCGTTTGTAGTGCCTTGTATGTCTATTTTCCCTCCTTGCAGCAACAGCGATTACTATTCCCT  
GAGCTGGTGAAATCCCTATATCGTTGGCCCCAAGCTGGCGTATATCGTGGGTTCTGCATTG  
CAGATGATTCCGCGAGGTAACAGACCTTGGCGTTGGTTTCGTGATGCCAATGCTTTGCGC  
GGGCGCAGCGTTAAAGGTCCCGTCCGCGCGAGCGATTCCCTTGGAGGTCGCAGGCCTGGACAG  
CATTTACTTAGTGCAGGTCGCGCGAGCGATTCCCTTGGAGGTCGCAGGCCTGGACAG  
CCGGGGCCGCGTACGGTGTGGTTGAGGTGGTGGAGGGGCGCGTCGAAAAGCATTGTGCG  
TGTTGTGTCGCTTTTGGCAGTCGGATGGCGTGGTGGCTC

>RXA02570-downstream  
TAACTCAAATCGTCGGACCGTCC

>RXA02573-upstream  
CTTCCACACGGCTCTAACTATAGGAAAAGACGGCAGCAAAGCATTAATCGTCGGTAGGCT  
GAAGTGAAGTACTTTCCGAAAGATTACAGGGAGCATGCA

>RXA02573  
ATGACGAACAAAACCATGCTGGTTGCTTTTGTATGGCTCACCGGAATCCCGGCGCGCTTTG  
GAATATGCGGCGAAATTGTTGCAGCCGCGCACCGTGGAATTTTAACTGCGTGGGAGCCA  
TTGCATCGGCAAGCTGCGCGCTCGGTTTCGTGTATCACCTTGGGGGTGGAACCCGAAGAC  
CCCGCCCATTTCCGCTGCACATAAAACCTGCCAGGAAGGCGTAGAGCTAGCCCCATCTCTA  
GGTCTGGAAGCGCGAGCCACATGGTGGAAATCCGCAACGCGCGTGTGGAGCGCCATCGTT  
GATGCTGCTGACGAGCTCCGCCCCGACGTGATTGTACCGGCACCCGCGGGATCTCCGGA  
TGGAATCCCTGTGGCAATCCTCCACCTCAGACAGCGTGTCCACCACGCCGACGTACCA  
GTTTTTGTGCTTCCACCCCTGGAC

>RXA02573-downstream  
TAAAACCGAGACGAGAACCAAGA

>RXA02575-upstream  
CCAATTGCTCTACATCACAGTCTCGAACAAAAGTGAAGTTACCAGTCCGTAACCCCTTC  
TGAGTAGGAATTTGCGATCAGTGCAACTAGCCTTTCAGGT

>RXA02575  
GTGAAGAACTCTGGGAAAAATTCGGCAAAGAATCGGACCAAAGGGATCCTAATCGGGGTT  
CTCGTTGGTCTGATTGCCATTTTTCAGGCATCTATGCGGTCGATGTTTTCTCAACAAG  
GACAACATCCCTCGTGGAACAACCGTCGGTGGCGTCAGTATTTCCAACCTCAGTGACAA  
GAAGCCCGCACAAAGTTGGAACCGAACTGGCCAATGATGTGGTGCAGCCCCGTACCGTG  
ACGGCAGGGGAGCAGAGCACCACTTTTGATCCAGTTGCCTCCGGCGTCGGCATCGATTGG  
GACGCAACCATCGAAGGACCGGCGAGCAGTCTTGAACCCCATTAACCGCTTCGTGGCG  
CTGTTCAAAGAATCCGAATCTCCCATCGTGAGCACCGTCGATCCCGCAGCCTTCGGCCCCG  
ACCCTTGATCGCATGGTCGGCGAACTCTATCGAGATCCCATTTCCGGAAACCTGCATATC  
GACGCCGGCACCCCTCGTGGTCAACGACACCATCGACGGACAAGCCGTAGACCGACCAT

TTGGAACAAGCAGTCACAGAAAACCTGGCTCAACCCAGAGGGCGTAAAAGCCGAGCCATAC  
 GTTGTTCCTCGCTGCGATCAGCCAAGACACCATCGATAAACTTGCAGAAGGCGCCGGAGCT  
 AAAGCAGTATCTAGCCCTTTTCGTGCTCCGAGGCGATGACGGAATTGAAGGCACCATCCCC  
 GTCGAGCGCATGGGTGAAGTGGTGAGTTTCCCAGAAGAAAACGGCACCATCCGCGTCGAC  
 ATCAATGCAGAAGCAGCAACAGCAATGCTGGCCGAAGGTCTCAAAGAAACAGAGATCGAG  
 CCCACCAACGCTCAAATCAGTTTCTCCTCAGGCTCCCGCGTAGTCACCCCAAGAAGTCACC  
 GGACACGGAATCAACTGGGAAGAAACCTGGCCGATCTGCCCAACAACCTCACC GGCGAT  
 GGCCCCCGCACCATCGACGCAATCTACGAGGACACCCCAAGCAACATTCACCGCCACCGAC  
 GCCCCAAAACGCTACCTTCAATGAGGTCAATGGGCGAGTTCACCACCGGCGGCTTCTCTGCT  
 GCCTCCGGAACAAACATCCGCCTCACC GCGCAAATGGTCGACGGCGCAGTCGTTTCACCT  
 GGCGATACATTCTCCCTC

>RXA02576-upstream

CTTAGGCCTGTGCTTGCCTTGCATTGGTGTGTTCCCTCACGGGAATTTTCAAGCGCGGCCA  
 GCTGATGAGCACTGTGAATAAACTCAGGAGTTAAATCCTT

>RXA02576

ATGACCCCGACCCGCCGTATCCTGCTGTGGGCATGGACGACTGTGCTTTTGGGTTCCTTG  
 CTGTGGCCGTTGGCTGCGCCTGGCGAGTTGTTGTTGCGGGATATGTCGGTGGTGGACCAT  
 CCTGCGTTGTCGTTGAATGCGTTGGGTTTTGGTGATTGTCGTCGCGGAACGCCCGCAG  
 GATGGTGCTGGCGTTGCTTGGCTTTTTCGCGGTGAGTTGGATCGTTTCAACCATGCTG  
 CTTGTGGCGGGTTTCGCGGGCGCGTGGGGTGCGATGCGCCTTGGGCCTTCCAAGTTTGTG  
 GCCGTTACCGTGCGGATTTACAATCCCTTCGTGGTGGAGCGCTCTGCTGCAGGGCCATTGG  
 TCGTTGGTGATGGCGGTGTGGCTGTTCCCGCTGGTTGTGGCGCTGCGCAGGCATCCGCGT  
 TGGCAGGTTGTGGCGATCTGGGCGGCGTCTGTTGACGCCCACGGGTGCGGTGGTTGCGGCG  
 GTCACGGGCGTGCGGAGTTCTAAAAGAAAACGCTTTACGACGCTATGTTCTTCTCTTCG  
 TGGCTTCCCTTGGCTAATACCTGCGCTTCTTGCCACCCCCACTTCGGGAGGTGCGCTGACC  
 TTCGCCATTCGTTCTGAAACATATGCAGGAACGTTGGGAACGTCGCTGGGCCTGGGTGGA  
 ATTTGGAACGCGGGGCCGTGCCCGCCTCACGCGAAGTGGGTTTCGCGGTTGCTGGAATT  
 TTGTTATTTGCGATTCTGCTGGCGGGTTTCAAAAACGTCGCTGGGTTCCTCGCACTGCTG  
 GCGGTGCTAGGTTTATGGGGGCGATCGGTCCGTGGCTGATGCCGAATCTGTTACAGTGG  
 ACCATCGCATATGTTCCAGGCGCCGCGCTGTTTAGGGATTCTCAAAAACCTCTCATGCTG  
 GCTATCCCTGCCATATGTGTGTTTGGCCGCCGGGGTGAAAAGCCCACTGTCGTGGGTGGCT  
 ACCGGTTTGGCGTTGCTCCAGATTCTGATGCACCACTGAGGTTTCCGTGATACGCCCA  
 AGTTCAGCGCATGTGGAATCAGTGGAAGCACTGGCAGAAATCGCTGATGGCCGCGACATC  
 TTAATCATCGGCCAAGGCCCTTGGTGACCCGCGAGGATGGGATCCCGGTTGTGATCCC  
 AAAACCAAAGCCCTCTCCGTGGTGGAATCCGGCGAAGTGGTGTGGACGGAATCATCACC  
 GACCGCCCTCACAGCGGTGGACCGAAGCAACGAGGCATGGGCGGCGGGGATATCGAG  
 CGCCTTGAAGAACTTGGCGTTGGTGCTGCTGGTGATGGAGATACGATCACAGAACTGGC  
 GCACCACCGCAGCATGGCTGGAAATACTACCTCGGTGTGGGCCTGACCGTGCTGTGGATG  
 CCGTTGCCGCTGGGACTACTTTTTTCGACGCAAGACCAAGAAG

>RXA02576-downstream

TAGTTCCTCGAACTGCGCTCCCG

>RXA02577-upstream

GGGGTCGACGAGGTTTGAATGCAACGTGGGTGCGCAAGACTCCCAGGGAGGCGATTGC  
 GCGTAGTCCCTCGAGTGAGCTGATGAATCCGCGATGGCGG

>RXA02577

ATGGGTGCATATGATTGGGTAGACATTATTTCAACATGCGAGTTTAGCGGAAAGGTGTGG  
 GCTGTTTTTATGAAGCGATCTGCAACGGTCCCTCATTATTGCGGGCGTGCTGTTCCCTCATT  
 TTTGCCCTTACGGTACCGCCGTATGTGACTGGTCAGGCGCGGACGATTCCGAAGGATTTG  
 GATCTGACGTTGGTGAGCGAAAGTCCGCGAGGGTTTGTGCGCACTGAACATATTGTGACT  
 GCTCCGACGGAAGGTCGATGAGATCGCGACGCATGTGGATCAGACAGTTACGGATGTG  
 CAGGGGAAAACGTTGCGGAAATTTCCGATGATGTGGTGTGATTGGACACTCTCGTTAT  
 CCGGTGATTAAGCCGACTGCCACCATTTCCGGGTTCCGCGCGGATAGTAGCAATGTGGTG  
 CGGGAGGGGTTGCATTACTTCTTCCCGGCTAATACGTTGCGGAATTCTTATCCCTATTAT  
 GACATCGTATTGGGTGAGGATTCCCCGGTGATTATGTCTCGCGCGAGGGCAATACTTAT

ACCTTCTACCAGCATCTTCGTTATGTTCCATTGGATGATTCTCACACCTATTTCGGTGGAG  
CGGACCCGTAAAGTGGATCGTTTTTCCGGCATCATTTGTGGCTAAAGATGAGGCGATGACG  
TTTCATGCCCCAGACGGCGATGACACAGTAGAATTCACCTATACGCGGATACGTTGAAG  
CTTCTGCAGGATCATGCGCATGATATTGATCAGCGGTTGTCGTGGGCTAAGGGGTTTGAT  
TTCTTTTCTAAATTCCTTAGGCCTGTCGTTGCTTGCGATTGGTGTGTTCCCTCACGGGAATT  
TTCAAGCGCGGCCAGCTGATGAGCACTGTGAATAAACTCAGGAGT

>RXA02577-downstream  
TAAATCCTTATGACCCCGACCCG

>RXA02584-upstream  
GACTCAAGGCCAATGAATCCCTGGATGTGGAACAGGATACGATTAACTCAGACTCTAACC  
GACAGTCCGCAATTGAAAGGCCAGATACGTGAACCGCTGG

>RXA02584  
ATGTCCTTGCTGTGATTCCATCGCCATCGGTCCTTCGCACTCTTCGCCCCGCGTCGCC  
CACCAAAGCGCCGACATGCCACTAAATGTGCAAGGCTGGTTTTTCACATGGCTGCCATTTC  
CTCGCAGGTGTGTTTCATCGCCTACCTGGTGGCAATCCTCCCTGCGAAGCTTCCAGCGAA  
CGCATCCGCCCCGCTGGCCTGACCGTGTGGATACTCGCGGTAATTGTGGGACTTGTGATT  
TGGGGCTTCAACAATGGTGGGGTTCCACACTGGTCCTTCATGATTGTCGCAACGACCGCC  
TCCGCCATTTTGGTTCTCGGCTGGCGAGCGTTGTTTAAGGTGACAATGCGC

>RXA02584-downstream  
TAAGTGCTTTTAAAAAATGGGAG

>RXA02585-upstream  
GCGAGGATTTTTCAGCAACCCCTGGATTTCGTTGGGCTTTGTCCCTGGCGTTTCTAGGGGT  
GATCCTATTTTTCCTGAGGGATCAGCTGGATTTCCTCAA

>RXA02585  
ATGGGCATCCAACAAATCCGCCACGTCAGCCCCGTAGGCGTTGCCCTCACCATGGTGGCG  
TTGGGTGTGTCATTCGTTGCGATGGCCAGAGTCATGCAGATCATGTTGAAAGCCGGAGGT  
AGTCCTGCGACTCTCAAAGCCACCACGGCTTTAACTTTTGC GGCTAACTCCTGGTCCGCG  
ACCCTTCCTGGCGGCCCGGCGTTTTTCCGCGATTCTCACCTATAAAGTGCAGCGCAGCTGG  
GGTGCCAGCGCCGTGCTGTGTTCTGTGGTTTTTCTGCTCTCCAGTGCCCTATCGACCGTC  
TGGTTGGTTGCTCTCGGTGTCTCGCCGTGTTTTATATGGGCGCATCGCTGAACTTATGG  
TCACTGATCGCCACATTCATCGCCATGGTCGGGCTGTCTGGCGCCGTTTATTGGGCAGCC  
AACAAACCCCGACTCCTTGGCTCGGTGGGTGCGAAAAATTGACGAAAAACAGGGAGTGGGGC  
TTCGTCGAAAAGCTTCTTGAAGCATTGAGCAGCTGCGCTCGGTCTCGCTCACCGGGCCG  
CAATTCGCGGCCAGCACCGCGTGGTCTTTAGGCAATAGGCTTTTCGACGCCATCTCCCTC  
TGGATTGTGATCTGGGCGGTACCGGCTGCCCCGATGTTTGAACAGAACCCAAACAAC  
ACCACCATCGCAGGCGTACTGTTGGCGTACACCACCGCAAAAATCGCAGGCTCAATCCAA  
GCCACCCAGGCGGAATCGGCCCATCGAAGCCGCCCTACATCGCAGCCCTCGTAGCCACC  
GGTATGACCGCAGTGGAAGCCGCGGAGCTGTCATAATCTACCGTTTATGCTCATTTATC  
ATCATGGCGATTGTGCGATGGGTCTATCTATTTTATCTATTTACCCCCCAGGGACTCAAG  
GCCAATGAATCCCTGGATGTGGAACAGGATACGATTAACTCAGACTCTAACCGACAGTCC  
GCAATTGAAAGGCCAGATACG

>RXA02585-downstream  
TGAACCGCTGGATGTCCTTGCTG

>RXA02588-upstream  
CTCAGCTGACTGACCGTCAGGTCATCACCAAGTTTGAAGGCAAAGGCTTGAAAAAGATC  
ACGTGATCAATGAGTACTTGTGGCAGAAGGTGCAAACTA

>RXA02588  
ATGTCTGATGTGCGATGAGGTCAATTCATAGCTACAATCCCACTGACAAAGAAGGCCCTGAA  
AGTGTCTTCTAGTGTGGGACGCTCCCAACCTAGATATGGGTTTGGGCGCTATTTTGGGT  
GGTCGCCCAACCGCTGCGTACCGACCTCGCTTTGATGCCATCGGTGCGTGGTTGCTTGCT

CGCGCAGGTCGCAGGGCACATGAGTTGGGCCGCCACATTGAGCCTGAGGCAACGGTGTTT  
GCCAACATCACCCCAGGTGGCTCTGATGTTGTTTCGACCTTGGGTGGAAGCGCTGCGTAAC  
GTTGGTTTCGCGGTCTTCGCTAAGCCTAAGATCGGCGAGGATTCGGATGTCGATCCGGAC  
ATGATTGATCACATTTCGAGGCGCTATGAAGAAGGCGTGCTGCGGGGTGTCATCGTGGCC  
ACTGCGAGATGGTCAGAACTTCCGTGAGACTCTCGAGGAGCTCGTTGCAGAGGGCATTCCCT  
GCCACGGTCATTGGTTTCCACGAGCACGCGTCATGGGCTGTAGCTCATGACACCATCGAG  
TTTGTGATCTGGAGGAAATCCCCGGCGTCTTCCGTGAGCCGCTTCCTCGCGTCAGCCTG  
GATAACCTGCCAGACGGTGGCGCATGGCTGCAGCCGTTCCGCCCTCTGACTGCCTTGTTA  
TCCAACCGCCACAATTCCAGGAG

>RXA02588-downstream  
TAATCCACCCGTGTTTTCTAAAT

>RXA02591-upstream  
ATGTGTCCGTTGTCTCACCTAAAGTTTAACTAGTTCTGTATCTGAAAGCTACGCTAGGG  
GGCGAGAACTCTGTGAATGACACAAAATCTGGAGAAGTA

>RXA02591  
ATGACTACTGCTGCAATCAGGGGCCTTCAGGGCGAGGCGCCGACCAAGAATAAGGAACTG  
CTGAATCGGATCGCAGACGCCGTCGAGCTCTTCCAGCCTGAGGCTGTTGTGTTTCGTTGAT  
GGATCCCAGGCTGAGTGGGATCGCATGGCGGAGGATCTTGTGTTGAAGCCGGTACCCCTCATC  
AAGCTCAACGAGGAAAAGCGTCCGAACAGCTACCTAGCTCGTTCCAACCCATCTGACGTT  
GCGCGCGTTGAGTCCCGCACCTTCATCTGCTCCGAGAAGGAAGAAGATGCTGGCCCAACC  
AACAATGCGGCTCCACCACAGGCAATGAAGGACGAAATGTCCAAGCATTACGCTGGTTCC  
ATGAAGGGGCGCACCATGTACGTCGTGCCTTTCTGCATGGGTCCAATCAGCGATCCGGAC  
CCTAAGCTTGGTGTGCAGCTCACTGACTCCGAGTACGTTGTTCATGTCCATGCGCATCATG  
ACCCGCATGGGTATTTGAAGCGCTGGACAAGATCGGCGCGAACGGCAGCTTCGTCAGGTGC  
CTCCACTCCGTTGGTGTCTCTTTGGAGCCAGGCCAGGAAGACGTTGCATGGCCTTGCAAC  
GACACCAAGTACATCACCCAGTTCCAGAGACCAAGGAAATTTGGTCTTACGGTTCCGGC  
TACGGCGGAAACGCAATCCTGGCAAAGAAGTGCTACGCACTGCGTATCGCATCTGTCATG  
GCTCGCGAAGAAGGATGGATGGCTGAGCACATGCTCATCTGAAGCTGATCAACCCAGAG  
GGCAAGGCGTACCACATCGCAGCAGCATTCCCATCTGCTTGTGGCAAGACCAACCTCGCC  
ATGATCACTCCAACCATCCCAGGCTGGACCGCTCAGGTTGTTGGCGACGACATCGCTTGG  
CTGAAGCTGCGCGAGGACGGCCTCTACGCAAGTTAACCCAGAAAATGGTTTCTTCGGTGTT  
GCTCCAGGCACCAACTACGCATCCAACCCAATCGCGATGAAGACCATGGAACCAGGCAAC  
ACCTGTTCACCAACGTGGCACTCACCGACGACGGCGACATCTGGTGGGAAGGCATGGAC  
GGGACGCGCCCGAGTCACTCATTGACTGGATGGGCAACGACTGGACCCAGAGTCCGAC  
GAAAACGCTGCTCACCTTAACCTCCGTTACTGCGTAGCAATCGACCAAGTCCCAGCAGCA  
GCACCTGAGTTCAACGACTGGGAAGGCGTCAAGATCGACGCAATCCTCTTCGGTGGACGT  
CGCGCAGACACCGTCCCACTGGTTACCCAGACCTACGACTGGGAGCACGGCACCATGGTT  
GGTGCATGCTCGCATCCGGTCAGACCGCAGCTTCCGCAAGCAAAGGTCCGGCACACTC  
CGCCACGACCCAATGGCAATGCTCCATTTCATTGGCTACAACGCTGGTGAATACCTGCAG  
AACTGGATTGACATGGGTAACAAGGTTGGCGACAAGATGCCATCCATCTTCCTGGTCAAC  
TGGTCCGCGGTGGCGAAGATGGACGCTTCCTGTGGCCTGGCTTCGGCGACAACCTCTCGC  
GTTCTGAAGTGGGTCATCGACCGCATCGAAGGCCACGTTGGCGCAGACGAGACCGTTGTT  
GGACACACCGCTAAGGCCGAAGACCTCGACCTCGACGGCCTCGACACCCCAATTGAGGAT  
GTCAAGGAAGCACTGACCGCTCCTGCAGAGCAGTGGGCAAACGACGTTGAAGACAACGCC  
GAGTACCTCACTTTCTCGGACCACGTGTTCTGCAGAGGTTACAGCCAGTTTCGATGCT  
CTGAAGGCCCGCATTTACAGCAGCTCACGCT

>RXA02591-downstream  
TAAAGTTCACGCTTAAGAACTGC

>RXA02593-upstream  
TGACGATGACGCGCATCGGCGCCTCCCGCCTTGGACTCTAGCACCAGTTGAACGTCAT  
TGCCGGGGGCTCTGGAGATTCCGGGGATTCCGGGGATTAT

>RXA02593  
TTGAAGATTGCACACTTCGACCTAGACAACCCCGCCGACGAGTCCTCCTACATCTTCGCG

CGCAGCCTCGCAGAAAGTAGACGGCTGGACCCTAGAATTCGGCGTCGCAGGAGTAAAAAAC  
ACCACCATTGTTTCCCTCCATCGACGATGCCATCACCACCATTTCGCGATGGATGAACGGC  
GAAGACATCCGCGACCTCAACTGGACCCGCGCA

>RXA02593-downstream  
TAAATGGCCTCATTTCCGGAGCT

>RXA02594-upstream  
GCGTTCACTTCCGCCACCTTGAGGATGAGTGGTATCACGCCAGCACAAACAAAGGATCTT  
CATAGGGTTATTAGTCTAGCTGCTTTTAAACAAGCCATA

>RXA02594  
ATGGAAGCCATGGCCACAACGATCACCGTTTTCTCTCCCACCCACTCCCCCGCACAAATC  
CGCGAAACCATCCTCAGCGCCGCGAAAGAAGACGACGTGGACTTCCTCGGAGTCCCCCTT  
ACCCACCCAGAAACGTCACCATCGAAGTCGACGACGAAGTATCAACGACTGCTTAGGC  
TGGCTCGACGACGTGGCACTCGCCTCCGGCCTGGGCATCCAATACAACGACGAAGTGCTC  
CGCTACGGCGACGAAGACATTTCCCTTTACCGTCCAAACCAAAAATGACGATGACGCCCGC  
ATCGGCGCCTCCCGCCTTGGACTC

>RXA02594-downstream  
TAGCACCAGTTGAACGTCATTGC

>RXA02598-upstream  
CTTTGGGAAAGTACCCCTATGACGGAAACTGGATGGATCCTGTGGTTGAACCACAGTC  
AACGGGAGAGGGGAAATCGGACACTATATGGTTGGAGATC

>RXA02598  
GTGACAACTGACCAAAACAAAAGAAGTCTCAGTGAGCTTGCGGCCAGAATCGTTAGTGAA  
ATCTGTGCACCGTGGGTACTCAACATCGGATTTTTCTCATCCTGGGCGGCGTAACAGGC  
GCCTGGACGCTAGGAATTGTGGCGGCAATCGGAACCGGAATCGTTCCGATGATCTTAATT  
TTGGGCTTGATGAAGCTCGGCAGGGTAGGAAACACCATGTGACGACCCGAAATCAGCGC  
GGCCTTGTGTTGTGGGCATCATTTGTTGTGTCATCATTTTGATTTTTATCCTCAGAGCC  
CTTGAAGCACCTCAGCTGATTTGGGATGGCATGTTCTCAGCACTGATTTTCTTAGTTCTG  
TTTGACAAAGTGACGTTGAAAATTAAAGCCTCAGTTCATGTTGGGCTGTGGGTGTGTTTA  
GTGATGTTCTCGGTCTGACGGTTTCTTCGTGGTGGTTACTCGGGTTGCTGTTTACCCCA  
GTCACCGCGTGGGCACGTATGCGGATCAAGCATCATACGATGTCGGAGATTGTGGCGGGC  
GTTGTTACAGGAGCAGTTGCAACCGGCATTTGTTATGCACTCCTACTTGCG

>RXA02598-downstream  
TAAAGGAGAATTATGGATCAGCT

>RXA02600-upstream  
GATTTTGCTTTTCGACGCACCGTTCGGCCGTTATCTAGATCTGGTCACAATGTCGGTTTT  
TCATGGATTCATGTCCTTTATCGGACGTACTGTGGGGAGT

>RXA02600  
ATGCAACCTTTTCCACTGTCCTTAACCAACAGCTCCGTCGCTGGTATTGCAGCGGGAGCG  
TTGCTGTTTCTCTCCGTCCCTTTTCGCATCGCCTGTTACGCGCAAACCATACTGCAAGAC  
ACCCTTGAAGTGACTGTGTTGGATAATGCCGACGAGCTCGCTCCAGAGGATGAGGATTT  
CTCAGCACGGAAACACCCAAGATTGATTTCCCTGACTCAGTTACCGCAGTCCGGTACATC  
ACGCTCACGGACAACACTGACAAAATCAATGATGACGTTGAAAATTACCTGCGCGCCGAA  
CACCCCGAGTGGATCCAAACAACTCTTTCCGCCCCCTGGTGAAGTGATCATCGCAGTCGGT  
TTCCGACCCCAACACCATGGGTGCCTACGCGGGTAACGATGTGGCCGAGAGACTGGGATC  
GCAGAAACAAGACCGCATCGACGGCACACCGGATGCGATGCGCCCATTAATCCAAGACGGT  
CGCATTGCCCTAGGCATGTTGGAGGGTGCAAAATCGGTTGCTGATACCTCTGTCTCGG  
GAAAGCTCAGCTCCAAGTGGTGGAGTAATCGCCGCTATTTTGGGTGGCATCGCTGCTCTC  
GTGGCAATTATTGTGCGGTGGGCTACGAGTTACGCGAATAAGAAGAAGGCAGAAAAGGCT  
CGTGAGCAGTTTGATTATGCATCACGCCATTATGGTGAGGTCGCCCAGCAACTCGACGGT

ATCAACGTGCGAGCGCACTCGCTAACTTCCCCACTGGCTGATGATGAGCTCCGCAGGCAA  
TGGGACGATGTAAATTCCTCGTTTTCTTGAAGTCAATGATATTTTTGGCAGGCTCGAAGGT  
TTGACCTCGACCTCAGAAAACAAGGCATTTTCGAAAAGCCTTGCCAGATATTGAAAAAGCT  
CATACTGCCGTGACTCAAATGGAGATCGCACAGAAAAACATTGACACGCTCTACGATATG  
GAGCACGGCCATGAAGACACCCGTCGCAGGGAATTAAC TAGGCTGCGTGCCGATATGCAG  
GAAGCCCGTCAAGATATCAACGATAAAGATGCAGTTGTTGACGATATTCTCCGCACGCTG  
ATCCAGCGCACGAAACTATCGCACCCGTCGCACCTGATTTTCATGGACCAATACGCCCCG  
TTGATCCGTGATTATGCCGTGGCGCTTCAAGGTGTGGAAAAGAACCCTCGAGCAGGTTAA  
CAGACCACCGAGCGCAATGCTCCAGCCATCTACGACGACAATTGGCGCGTGCGGCACTGGC  
TACAACCTCGTGGGTCCCCTACTACATGATCAGTTCTTGGCACGCAGCTGATGTCAGTGCT  
GCATCGTCAGCTTCTTCCAGTTTCAGCAATACCACTTTCAGCAGTGGTTTCAGCGGCGCT  
GGAGGAGGTTCCAGCTGG

>RXA02600-downstream  
TAAACACCACCACTGAAGTCAAC

>RXA02601-upstream  
CTCATACAATTGCCAGGATCTTCCATGGCGGATACGGCGCGTAAGTTCGTGAATGCGGG  
GTCCGGATACTACGCTTAGGCAAGATAAATTGTGAGTTCA

>RXA02601  
ATGAAGGGTGAAGATACGTCAATGAGCGCAACAAACCTGGCGGTTGAGCAGCTACAGCGA  
GTGCTCCTGCCGAGGCGCGGCGAGCCAGCAGATGTCAGGTCGTTGTACCTGTTGGAAGCA  
GAAAGTAATAAGGAACGCCCTGGAATGGGAAGATCGTTTTAGCGTTTCCGTCCCCGCTGGC  
GCCGAGGTGTCTTTTCAGACCTACTTCAATGCATTTCTTGCAAGCTACTGGCGTCGCTGG  
TCACAGCTAGATTCTGTCTGACTGAAACTGAAAGTTTCCGGCGAAGCGCGCGTCGACCTC  
TACCGATCCAAGATCGATGGAGCACGCATCGGAATTACCGGTTCCGTAGTCAAAGATGAC  
TTCATCGAATTTGAAGTTTCATTAGCCCCATTGGAAGACGGCGGCTGGATCTGGTTTCGAC  
CTCACCGCTGAAACCGACGCAACCGTCGAAGAAGCAGGCTGGTACGCTCCACACGCGCCA  
AAAGCCCAGATCATGCCAGATGGATCTGAAGTCGGCCCATTGGAAGCCCGTGCAACCGTC  
GGAATCCCCGACCTTCAACCGCCAGCTGATGCAGTTGCAGCACTGGAAGCACTTGCCCTCC  
GACCCAGCAGTTGACGCGCTCATTTGATACCGTCATCATGCCTGATCAAGGCAACAAGCAC  
CCTGCCGACGAGCCAGGTTACAAGGCAGCTGTTGAGCACTTCGGCGACCGCTTCTTCGAA  
TTCCGCCAGGGCAACCTCGGCGGATCCGGCGGTTACTCCCGCATCATGTTTGAAGCCCTT  
GGCGGAGTCGACGGCAAGGGCGAAGCAGGCGCTGCCAAGAGCCCATACATCCTGTACATG  
GATGACGACATTGCTATTGAGCCAGACTCAGTGCTGCGTGCGCTTCAGGTAGCCCGCTAC  
GCAAAATCCCCCATCTCTGTTGGCGGACAAATGCTCAACCTGCAAGAGCGCAGCCACCTT  
CACACCATGGGCGAAGTAGTTGGCGGACACGACTTCATGTGGACCGCCGACCAACAGTG  
CACTACGACCACGACTTCTCTGCACACCCACTACATGATCGCGGTAAATTTCGACGACAAG  
CCAGACGCACCAAACCTCCCGCGACCTGCACCGCCGCATCGACGTTGACTTCAACGGCTGG  
TGGATGTGCATGATCCACGCGTTGTGCGCCGAACAGATCGGCCAACCACTCCCACTCTTT  
ATCAAGTGGGACGACGCCGAATACGGTCTACGCGCACGCAAAGCTGGATTCCCCACAGCA  
ACCTGGCCAGGAATCGCAATCTGGCACATGGCCTGGTCCGACAAAGACGACGCCATCGAC  
TGGCAGGCCTACTTCCACCTCCGCAACCGCCTCGTGTTGCGCGGATGTACCACCAAGGC  
AGCGTCGACGGCATTGTCCGATCGATGCAAAAAGCCACCTTCAAGCACCTGCTGTGCCTG  
GAATACTCCACCGTGGCAATCCAAAACGAAGCAATGAAGGACTTCCTTGAGGACCAGAT  
CAGCTCTTCTCGATCCTGGACACCTCACTACCTCGAATTGCAGCGATTTCGAAAACCTAT  
CCAGACGCCGTTGTGCTGCCAAGCGCCACCGAACTGCCACGAGCAACCGGCGCGCCGGGT  
GTCCCAACCAAGGACATCGGTGGACGCTTGGCCCCAATCAAGAAGGCAATGTGGCTGGCT  
AAGGGCTGAAGCACTCCCTGTCTAAGGAAGATGCCCTCCACCACGAGGTGCCACAGGCC  
AACTTCGCACCAATCGAAGCACGTTGGTTTACGCTGTCCCGAGTCGATGGCGCAACAGTT  
ACCAACCGCGGATGGCCGCGGCTGGTCTACCGCAAGCGGACCGCGACAAAGCTAAAGAA  
CTTGGCAAAGAAGCACGCGCACTGCAAAAGCAAGTAGCAGAGCGTTTCGACGAACCTCAGT  
CGCGCCTACCGCAACGCTCATCCTGAGCTTGTGAGCCGTGAAGCCTGGGGAAAGGTCTTC  
GATGAGCAA

>RXA02601-downstream  
TAAGGAAGTACAGATTCTGGTAG

>RXA02602-upstream

CTGCAAAAGCAAGTAGCAGAGCGTTTCGACGAACTCAGTCGCGCCTACCGCAACGCTCAT  
CCTGAGCTTGTGAGCCGTGAAGCCTGGGGAAAGGTCTTCG

>RXA02602

ATGAGCAATAAGGAAGTACAGATTCTGGTAGCAATCCAGGATCAACTCATGGATGCCCCA  
GGAGTACTGCCCACCGCACGAGGACTCAGCCTGCTCGGCGAACATGCTGCAGGCTGGCTG  
GCACTCGGCGCTGGCGGTGCTGTTGTGGACAAAAACGTCGCCGCTCCTGGGCTGGACTC  
TTCATCGCTGCAC'TGGGAAGCCACGCAGCATCAGTGATCATCAAACGAGTTGTCCGCCGC  
GCTCGGCCACATGACCCAGCCATCAGGATTGGTGTGGGCACCCCTCAAAGCTAAGCTTT  
CCTTCTTCACATGCGACCTCGACAACCGCAACTATGGTTTATCTTGCGCGCATCACCAAG  
TCACCAGTGCCACTGCTAGGAATCCCCATCATGGTGCTATCACGCATGGTGCTTGGCGTG  
CATTACCCAACCGATGTGCTAGCCGGCGCGTGTGTGGGAGCAGCGACCGCAGAGGCCGTC  
CATAAGATCGAAAGGGCTACGAAG

>RXA02602-downstream

TGAGCGAACACGCCGCTGAACAT

>RXA02604-upstream

TCTGCATCGTGATGGCTGTGTACATCATGCCGATGTTTTGAATATTTACCAATGAACATG  
CTCTGACCAGCATGTCCATTAACGTTTGAGGCCACATGCG

>RXA02604

GTGCTAGCATGTGGCCTCATGACGTTTAGCCCCAGCGTCCGGAGTTTGAGACCGGTAAG  
CAGCCAGATCCAGAACTGAACACGCAGGTGACTTCTTTGAAGAAACCTCAAGCAGTGCT  
CCTCGCGCCGCATCTAACGGTTCTTCTGGTCCGAACCTACACCCTCATTACAACGTTTCTA  
GCGGCCCTTACTGCTGGCATCTTTGCTTTCTGGGCAGGCTGGACCCGCAAATGGATCAGC  
GACGACGGACTGATCGTCTTACGCACCGTCCGAAACCTCCTGGCTGGAAACGGGCCAGTA  
TTCAACGCTGGCGAACGCTCGAAGCCAACACATCTACTCTGTGGCAATACTGCATCTAT  
CTGGTTGGCTTAGTAAGTACTGACTATCGCCTCGAAGATATTGCTCTGTGGCTTGCCTGCTG  
TTCACCACCGCAGCGTCCATCATCGGTGTCTGGGTACCGCGCATCTCCACCGCAAACGC  
ATTGCCGTATTGCTTCTTGCAGGCGTGATCGGCTACTTCAGCCTTTCCCCGGCGCGAGAC  
TTTGCCACTTCCGGATTGGAGTGGGGCCTATCTTTGATGTGGATTTCCATCCAATGGCTG  
CTGCTGGTGTTGTGGGCGACTTCGGGCAAGACCTCGGGCAAGAAGGCTTCGGGCGCAAAA  
ACTTCAAATCCTATCGTTAATGCCGGTGCAATAACCTATGCTTTGGCCTTTTGGTCAGGC  
TTGAGCTGGCTGGTTCGCCCAGAACTGGCGATGTATGGCGGTTTGACTGGAGTGTGTGCTG  
CTGCTTACTGCGCCACGATGGCGGGTAGTTTGGGGATCCTGGTGGCGGCTTTGCCTCTT  
CCAGCTGCGTACCAAATCTTCCGCATGGGTATTACGGGCTGATGGTGCCGCACACGGCT  
GTAGCGAAATCAGCCTCAGATGCGGTGTGGGGGACTGGTTGGGAATATGTTGAGGATTTT  
ACGGGGCCTTACAACCTGTGGCTCGGTTTGGCCTTGCTGTTGGCCGCAGGCGCGTTGACA  
GTGTGGAAAACAGCAAGCACTTAGCGATACCGAAGGGGCGGCTGGGGCTGCGCACTCCG  
GGTATGGCTATAGCGTTGCTGGTTATCTGTGCGCTCGTCCACTTCCTTTACGTTATCCGT  
GTTGGTGGCGACTTCATGCATGGACGCATGCTGCTCCTTCCACTTTTTGCCATTCTGCTG  
CCTGTTTCTGTCAATCCGGTCAATGTTGTTGATCGAGGTTGGCAGGATTTGGTTGCGCTG  
GTTCTCGTTTTCTTACGTGGGTGTGGTCCACTGTGGTTTTTGTGCAGGGGCACCAATGG  
GAAAATACCGGCCAGCATGTGGTTGATGAGCGTGATTTTGGATTGATTTACCAACCGA  
GATGAAGATCATCTCCGCTTTATGCAGAGGATTTCCCTCACTGTTGATTCCATGAATGAT  
TACGCAGAGGTTATGCGCGATCAGACGTTGGTTAATCCAACAGGCCAGCAACTCAATATT  
CTGGCCAGCAGTGACCCGACCACTTATTCGTGGATCACCACACCTCGCGTGGAGGGGGTT  
GAAGCCGGTGATTTGGCTAACCTCTCGCCAACGTTTTTCATGTGAACCTCGGCATGACC  
TCCATGAACGCACCGCTCAACGTGCGTGTGACAGACCTGATTGGTTTGGCAACGCCACTG  
GCAGCCCGCCAGCCACGCATTGAAGGTGGTTCGAATCGGCCACGATAAATTGATGGACTTG  
GAATGGCAGGTCGCGGAATCCGCCACTCCGCTGGCGTACACACCGGGTTGGTTGGATACT  
CAAAAGACTTATGAGGCCCGCCAGGCGCTACGCCACCCAGAATTGGTTACCTTTTCCAG  
ACTTACCGTGAGCCAATGTCTTACCACCGGTTTGTGGACAATATTAAATACGCACTCACT  
ACCGGAAGAACACTGGAAATTTTCAGATAATCTTGAAGATCTTTTGAAGAATTTAAACCG  
ACCCCTGCAGAGATTACAGACGGGTTAGAAACTATTGCTTGGCCTGGGGAAATTAACCTT  
GATGAACCTCGCGGAGAACCTTTATATAGCTCTCAG

>RXA02604-downstream

TAAACACTTATTCGCAAATCATT

> >RXA02606-upstream

AGGGCGCGGATCACTTCGGATCTGTGGATAACTTTTAAGGCCCTTGTTTTCCCCTTGAAG  
CTTCGGTTGTGTGGAAAACAGAAAAGGAGGGGAAAACAAA

>RXA02606

ATGCAAGAAATCCACACCATCATGAAACACATGGACGCGCTCATCGCCGACCCGTCCGCC  
GCCGCATTCAAAGCAACACTCCCTTCGCCGAACCTCTCGAAAAGCTCCACAACAAAAA  
GCGCTTTTCGACGCGCCCTCGCCAAATCCGCCGAGCGCGCCGATGCCGGACGCATCATC  
GGAAAAACCTCCCACATCGATGCCCTCGCGTACCTTCTCGACATCTCCAAATCCGAAGCA  
TTCCGACGCACAAAACGCGCCGAAGAACACTACGGCAACCCAAGCCCGGAACCCAGTTCA  
GAAGAACTCGCGAAAGAAACCCCGAAGAGAAGCTAGCCAGAGAAGAAAAGAGAAACAA  
GACCTAGCCGAACAAGCAGAAGCCAACCGCATCGCCCGCAACACGGCATCTCCGCCGAA  
AAACAAGACACCATCCGCTACGAACTAGAAAACTCAACGACAACACATCCCTATCCCGA  
GCCTCACTCCGCAAACTAGCAATGCAGGAAGCCACCAGCCGAACCCCGAAGACCTACGC  
AACTGGACCCGCAACAAAGTTATCCGCATAAAACCCACCGCCAAAGACCCACTCGCCGCA  
GTAAAGAAACGCTCCTTAAGCATCGGACGCCAAGACCACGACGGCGGAGCCAAAGCATCC  
CTCTATTTAGATGCCAAAGGTCTAGCCCTGCTCAAACTCACTGATGTCTAAAGCCAAGCCG  
GGGCATTTGCTTGAAGACTCTTTGGCGGAGGATAAACGTACGAAACCGCAACGCCAATAC  
GATGCCCTTCGCCGACATCTCCACCGCGCACACAGCGATCTCCTCCCCGCACGATCCGGA  
GTGGGCACCATCCTCGTCTCCCTCTCCGCCAAAGACGTAACAAACCTCAAAGCATCGGGC  
CCCGACCACCGCTACCCACACGACACCGGCATAAACTCACACCGCTTGAGATCCTGCGA  
CTCGGTGCAGCCAAATATGACTTCGTGACCGTCTCTCGACTCCGAATCCGGCCGTCCGCTG  
CACCTGGCAGCACTCAACGCACCGCCAGCCTGTATCAACGCCTAGCCCTCTTCGCCTCC  
GAACCTCGTCTGCACCCGCGAAGGCTGCGACTCCCCCTTCGAAGACAACGAAATACACCAC  
ATCAGATCCTGGCTAGACGGCGGCCCCACAGACATAGAAAACATCACCAACATCTGCCCC  
CACGACCACGGAAACAACAACGACCAACGCGACGGCAAAGACAACATGGGGCACATGAAC  
ATAGATCCCACAACCGGGCGCGTCCGATATCAACCCGCCGACCGCCGAAAACCCATGCGG  
TTTAACAACACCGCAGCCGCAGCAGAATCAGGAGGAGCACAGGCCAGGACC

>RXA02606-downstream

TAAGTTTTTAGCGCGCCAAAAAG

>RXA02609-upstream

GACCGAACGCAGCAGTCAGGCGTCGCAAAGCAATGGAAGCGGCGGAAGCACAGCCCGGGA  
CGGGGCAGCCGAGGAAATCGACGGCCTGCCCGAGGTGACC

>RXA02609

GTGGAACGCAGCGCTGAGGCGCAAGCGTTCTTGATGCGCTGAAAGATGAAAAATCGAC  
ATCTCCGGCGTGAGGACCAAGTTGATTGCGACTGCGCGAAATTACTGCAGTTCCGAAAAC  
AAGGACCAAAACGTCATGTGATGCGGTTGCGAGGCCAGCTCATCGTGCAGGGACGCACC  
AGCGTGAAGGAAGATCAAGCAGCGGAAATTTCTACGCTGCTGAAGGAATCTGCGGATCGG  
ACGTATTGT

>RXA02609-downstream

TAACCGATGAGGAAAACCATCAC

>RXA02610-upstream

CCAGCTCATCGTGCAGGGACGCACCAGCGTGAAGGAAGATCAAGCAGCGGAAATTTCTAC  
GCTGCTGAAGGAATCTGCGGATCGGACGTATTGTTAACCG

>RXA02610

ATGAGGAAAACCATCACCGTTATTGCTGTATTGATCGTCCTCGCCTTAATCGGCGTGGGC  
ATCGTGCAGTATGTGAACACATCCGATGACTCAGATTTTATTGGCCAGCCTGGCGAGCCA  
ACCGGTACCGAAACCACGGAACACCGGTTCAACCTGATTGGTGCCCTGCGGTAGAAGTC  
ATTGCCGCGCCGGGTACGTGGGAGTCGGCTGCTAATGATGATCCGATCAACCCGACCGCT  
AATCCGCTGTCATTCATGTTGAGCATCACTCAGCCACTGCAGGAGCGTTATTCTGCGGAT



GACGTCAAGGTGTGGACGCTGCCGTACACTGCGCAGTTCCGCAACATCAACTCGCAAAAT  
GAGATGTCTATGATGATTTCGCGCAATGAAGGCACCGCGAAGATGAATGAGGAAGTATGATC  
AACACTCACAATGAGTGGCCGTGCCACGGAGTTCATCATCGTTGGTTTCTCCCAGGGTGGC  
GTCATTGCGGGCGATGTGGCTGCTCAGATCGGTTAGAGCAAGGTGTTATTCCAGCTGAC  
AGCGTCAGGGGTGTCGCCCTGATCGCTGACGGTCGCCGGGAGCCTGGTGTGGGCCAGTTC  
CCAGGCACGTTTGTGGATGGCATCGGCGCGGAGGTTACTCTGCAGCCTTTGAACTTGCTG  
GTGCAGCCGATTGTTCCGGGCGCAACCATGCGTGGCGGGCGCGCGGGCGGTTTCGGTGTG  
CTCAACGACCGGGTGCAGGATATTTGTGCTCCAAATGATGCGATCTGTGATGCTCCGGTG  
AATGTGCGCAACGCCCTTGATCGTGCCTTGGCCATGGTCTCCGCCAACGGTGTGCACGCG  
CTCTACGCCACCAATCCGGATGTTTTCCAGGCACAACCACCAATGCGTGGGTGTGGAT  
TGGGCGACCAACCTCATCGACAACGGA

>RXA02610-downstream  
TAAAGCTTTTTCGCTTTTCGACG

>RXA02617-upstream  
CTCTTTAATTAACTTTTGGGCGACCCCTTACGGTTCGTCTCTTGCCTTCCCAAACATAC  
CCAGTAAGTTACTGGGTATCCAACCTCTTGATTGGGGAACA

>RXA02617  
ATGTCCATAAAACATGCACCTTTGGTGTCTATGCTCGACGAACCAACCTCGGCAAGTCAG  
CTGCAAAACCAAGTTTGAAGAAACAATGGGGATCTGGCAGCTCAATATCGGCCAAGTCACC  
CAAACCATCCAGCGGCTACAGCGCGACGGCCTGGCGGAAACCGCAGGCACCACCGTCAGT  
TCCAACGGCCGCACCGTAGATACTTTCCAGCCACGGACTTAGGTGCGCAACTTGTGCGC  
CAGTGGTTTCGAAAGTCCCGTCACCGTCACACTGTCCGAACGCGATGAATTAGTCACCAAA  
ATCGCCATCGCAGAAATCACGTGGCCTCAATTTGATTCCACTTTTAGACATTCAACGCAAC  
ACAGTCATGGCGGAACCTACGCGCACTCAACAAATCCAGCCGCGATCTCGCCGAAACCAGA  
AACACCCAGCGGCTCCTCGTCGAAAAGCGAATCTTTGAACTAGAAGCCAGGCACGTTGG  
CTCGACCGAATTGAAGCATTGGAGCAG

>RXA02617-downstream  
TAAATGACAAACACGCCTTTCCC

>RXA02619-upstream  
AGCGACTTCTCAAAGAACCACCCCACTCATTTTCGAGTGCGGGTGGTTTTTTCTATGCCTA  
ATTCTATGCCTAATTCTATGTCTGATTCTATTGGTGTGCG

>RXA02619  
ATGCGCAGTGTAGTTTTAGAACTACTAGAGAACTGGAAGGAATCACTCGTGCTTCACCCC  
TCATTGACTGAGCTAGCGGATGCTGCCCCACTTGACACAGGATTTTGCCACCGTCCGCGGT  
GTGCTGAAGGAATCGCTGGATTTGTTGGGCAATGCACTGAACCACGGTGAAGAGCCCGCG  
GAGCTTGCAGGGTGGCTGTACAAAGTTATTACTGATGTTTGCACCTCCCCTGGCTTGGAT  
GCCCACGTGGTGTCTACCGGCCCGCTGGGGCGTGGAGACGCACTGCCTACCTCGCCCGTG  
AGGTGGCTGGCGGTCTGTCGATAGCCAAGAAGATCCGAATGAAAAGATTTCAGCGCTGTTA  
ACTGAGGTGGGCTTCATTGCGGAGCCGATCGGTGCGGCAACTCGTGAGGAGTGGGAGCAG  
CGTGCGCGCGCTGGTGAGGATCCAGAGGTCTATTTGGATGCTGGCACGTGGGTGCGCGCG  
ATCGCTGAAGTAGATGACAAAGCACTGTTGCAGGATGCGTTGTCTATCTAGGCCGCTGCG  
GTGGAAACTTATGAGGGTCTTCCTTCGTTGGACATGGTGGTAAACATTCTGTGAGAACCTC  
ATGATTCCCACGGTGAAGATCGCTCGCTGGGCAGCACACAAGGCTGGTTCTTTGGCGCCT  
ACGACTGCGCAGCGCTTCGTGGATGCCCCTGGTGTGCTCACCATGATGAAGTCGACGCG  
CTGACACAGGTGTGGACTTCCGCACTGAGCTTGCAGTCGAAACGTTGGATGGATCACATC  
CATGATCAAGAAACCACCGCTTGGGAGCTTCCCGCGCTGCAACGTGCCACTTTTGGCGCA  
TCGGCTCGGTTGCTTTCTGAGGTGTTGCGGTCCGTTGAAGCCCGTGAAATCGATACCAAA

>RXA02619-downstream  
TAGGAACTCTGCACAATTACTGG

>RXA02620-upstream

ATCGATACCAAAATAGGAACTCTGCACAATTACTGGCTACAATCTCTTGAGATCAATAGGC  
CAAAACTTTAAGGAAGTAGAATTACGCTATGGCAGGAGCA

>RXA02620

GTGGGACGCCCCCGGAGATCAGCTCCGCGACGGGCAGGCAAGAATCCTCGCGAGGAGATT  
CTTGACGCTCTGCTGAGCTTTTCACCCGTCAAGGCTTCGCAACAACCTCCACGCATCAA  
ATCGCTGATGCCGTGGGAATCCGCCAAGCCTCGCTGTATTATCACTTCCCGTCCAAGACG  
GAAATCTTCTCACCCTGCTGAAATCTACTGTGAGCCGCTCCACTGTGCTCGCCGAAGAG  
TTAAGCACCCCTGGACGCCGACCTGAGATGCGCCTCTGGGCAATCGTTGCCCTCCGAAGTG  
CGTCTGCTGCTGTCCACCAAGTGGAACGTGGTTCGCTGTACCAACTCCCCATCGTTGGT  
TCTGAAGAGTTCGCCGAGTACCACAGCCAGCGCAAGCCCTCACCAACGTCTTCCGCGAC  
CTCGCCACCGAAATCGTCGGTGACGACCCCGCGCAGAACTCCCCCTCCACATCACCATG  
TCGGTGATCGAAATGCGTCGCAACGACGGCAAGATTCCAAGCCCGCTTTCGCGAGACAGC  
CTCCCGGAGACCGCAATTATGCTTGCCGACGCCTCCCTCGCCGCTCTCGGCGCGCCGCTG  
CCCGCCGACCGGGTCGAAAAAACGCTTGAACATAATCAAGCAGGCTGACGCGAAA

>RXA02620-downstream

TAACCATCCGCGCCTGCGAAATC

>RXA02624

CAGGGCTACGACGACTCCGCCTCTGTTGTGGCCTTGATCGTCCTGAGCATTCTGTATCTG  
CCCAACATGATGATCTTTGCGATGGGCAATCTGATCGGCTCACCCCTTTACTTTCGGTGAC  
GCCTCCATCAGCGTCTTCAGCGTGATTCGGTTCCATTGCCACCGCTTCCCATCCTCGCA  
GCTCTCCCCAGCGAAGCCCTCTCATGGGCAGTGGCCTTACTGGTCATCCCTGCAATTATT  
GCCACTGGGTCTGCGTGAGAAACCCCATGCGCCTTGCCGTGAACACAACAGCAGCAGTC  
ATTTACGACTGTGTTTCTCGTCTGGCAGTTTTTCGCCGGCGGAACCTTGGGCGTATAC  
AACTACGTCGGACTCAACCTCCTGGCGTCAGTTGGCCTAGTTTTCTGTCTATTTGCCCCTC  
GTTGGACTCCTCATCGCCGGAATCGACAAGCTGCGCAACCCTGTAGAAGTTAAGTCTGTT  
AAGGCTGTGGCTGTTGTGGAGCCCGAGCCTGAAGAAGTTGAAGAGGACGAAGAGGAGCAT  
GTTGAAGAAGAAGTAGATGAGGAGGAAGAGGAAGTTGAGGAAGGGGTAGAAGAGGTGAA  
GAAGACGACGCAGAGGATCCTGAAGAGAATCCTGAAGAGGAAGAATCCGACGAAGAAAT  
GAGACAGAACTGAGGCTGAAGAAACCAATGATGGTTCCGAGGCCGAAGACCGT

>RXA02624-downstream

TAACATATCTGTTGTGAATTCTG

>RXA02639-upstream

CGAAAATGTTGGAAATCGCCGAACGGGAACGTCGACAAGCAAAACGCGCGGCAAAGGTG  
CCAAGAAACGCACCACCTTTATAAGGAAAATCTTTAAAAA

>RXA02639

ATGATTGCACTGGGTTTCAGCGCCCAAGCTGGTTGCCTCCGATGTTGATGGCACCCCTCATC  
AATAGTTCTGAGCGCGTGCCGCAACGCCTGCGCGATGTGATCACGCGGATGACCAATCAG  
GGCGTGACCCCTGGCGCTGTCCACGGGCGCCCGCCGCGCTGGATTCTATTATGTGCTGGAT  
CAGCTGAGCGTGAAGCCGATTTGCGTCTGCGCGAATGGCGCGGTGCTGTACGATTCCGCT  
GCCGATGAGATTCTTGCAGCTCAGACGCTTAGTCCGGAGGTTATGGCGAGTGCCGTCATG  
GCTGCGCGTGCCGCTTTGGAAGAGCATGGCGGGGTGAGTATTGCTGTCGAGCGCGCTGGA  
AAATCCGCTTACGATCCAGCCGATGAGCTGTTTTTGGTCACCCCGGAATACAGCCACGCG  
TGGCCCTCAAATGATCACGGCACCTTCGAGGAAGCCGAAGTGCTTTCCGAACCAGCCACC  
AAATTGTTGATGCGCGAGCGATTACCTCGATTCCAAGCAGCTTTTGGATATCGTCCGCGCC  
TCCGTTCCCGAGGATCAAGTCCACGTACCTTCTCCATGTCCGGCGGACTCATTTGAGATC  
GCAGCGCCCGCGGTGACCAAGGCACTGGGCGTATCGATGCTGGCAGAGCGCCTAAAGATT  
GCGCAAAAGGACGTTATAACGTTTCGGCGACATGCCCAACGATATTGAAATGCTCCAGTGG  
GCCGCGCGGGGAGTGGCGATGGGCAACGCCGACCAGAGGTCAAAGCCGTGTGAGACCAC  
ATCACCCGCACCAACGACGACGCCGGTGTAGCAGATGTATTGGAGTGGTGGTTT

>RXA02639-downstream

TAATAGGTGGTGTAAAAACACTG

>RXA02647-upstream

ATCTTCTATCTTGTTCATAGTAAATCCGCATATTTATTGCCAGGAGAAAAGTTTGTGCT  
TTTGCGTTCGAAGTACTTTGACCCTTGTTACAGCAAGCGCT

>RXA02647

GTGGCATTGTCCGTGTTCACTCCAGTTGCCCAGGCTCAGTCCTCTGACGCACTGACACAG  
CTCTCAGACAACATCACCTCATCAGATCCTTGATGATGATGGAAATCCAGTCGATGGA  
AACGAAACCTGGCCAGGCAGCTCTGAAGGCAGCTCAATGCTCAGCAATGGCGACATTCCCT  
GCGGCCCCAAGCTTGAGCTCCTCCGGCAAAGACACCAGCGATGATGACGATGAAATCAGC  
GAAGAGCAGCAAGCACTGATCGATCGGTTGTCCGAAATGCCAGTGATTTGGTTCCATTGTC  
TCCCCACCAGAATGGCTTGCCATTCCTTTTGGCGTACTGCAGGGATTGCTCGCAATCACC  
ACTCTTGCTTCCACCGCAGCATCCTTCATGGTGACCGTCGACCCATCGTTCAAGCAGACT  
CTGCGTGACATGCTCACCCAGTTTGGCATCAACGTCGACGCT

>RXA02647-downstream

TAAAAGCACACTGACATAAAATG

>RXA02649-upstream

TTTTACACAGTTGCAGCAAAATTCGGCCATTCCGATTGCTTTTGACAGCTAAACTTTGCT  
ATTTGTTCTTTTGGCGCCGATGCCGATAGGTTTAAAGGC

>RXA02649

GTGCTAAAACGATTCTCTCACCCTCCAGCCCGCAAGTTCTTTCACGGAAAGTTGTCGCG  
TCCGCATTAGCTTTAACAACCGCGCTGGCTTTAGCCGCGTGATGTTCTCAGCCGAGCCG  
GACTCCCCCTGAAGTTGAGCAGGCGGTGGGTCTTGCGGTGGATACGCCACGTGTGGTGGTT  
GTGGATCCAGGCACTGGCGATTTGCAGCGCTTGCAATACAAAGACATCGCCCCCTGATGCC  
ACACAGGAACAGACCATCAATATTGCTGAAGGTTTGGCCCAATCGGTGGTGAATGCGGAC  
AGCGTGGATCCGCAGGCACCGCGGTGGCGATGTCACCACATTCACCTTCCTGTAA  
GCCACCACCGAGGAAGCGGAGTTTCAGCGATCAGGAAATGGTGAGCGCGACTCGCGATATC  
TCTCTACTTTTCGGTAAACCTACCTACACCGATCTTTCCCAAGTTGAAGATGTGAATTCC  
ACCGAGGGATTACGCTGGGAATCCGCGCAACAGATAGTGACAGCACACCACCTTAAGT  
TTCGACGCCCTGTTGATTCCACTGAAACTGGTGCATGCTCATGGAGCAATACTTACTC  
ACGTTTACGTCCCTTCCCATTGTGTTCCCTCTGACGATATTGGCGTGGGCGCGAAGTGG  
ACTGTGGATAGCCGTGTGACAGGCGAATCAACGCTGCTACAAACCGTGACCTACACGATC  
ACAGGGATCGACGGCGACAAAGTAAACCTCGATGTGGAAGTCTCTCAGCGCCCCAGCATG  
GGTGCCTTGAGATCACCGATGAAGAATCGGACGAGACCACCGGCGAGCTCACTGTCCTT  
AATTCCAACACCACCTCCGTGGGCACCTTGAAGTCGATCTGACTCAGCCTTTACCCACG  
TCAGGACAGGTTTCTTGGAACCACTCGCGTGATTTACGGCGGTTCCAATGAGCAGGTGCGT  
GTGGTGCAGGATTCCACCTCTTCGGTGAGCTTCGGAGACCAG

>RXA02649-downstream

TAATTTACCAATTAGGGTTGCCA

>RXA02652-upstream

CGCTTGGAATCAACCACCCAGCAGATGGCCGATGGATGGAAATCGTCTCCCCATATCCAA  
CTGATCTCCAACACGCTTTAGACGTTCTCCGCGAGCAATA

>RXA02652

ATGGATGGTGTGCGATAAAGGGCGACGCATCGTCGCCCTCCTAGCAATTCTCGCATTTGGTT  
GTCGTGGTTGCGATCTTGAGTTTCAGCGACCGCACCGCGAAACCCATGCAGCTCAACGGT  
GACATGCTCGGCCAAGACAACACGGAAACTTCCGTCGAGTACCGTCAGCGGGCATCGGAA  
TCATTGGAAAATGCCGCGGTGCGCGAAGAAGCCTATTCACTGGTGACGTTTACACAGCCG  
CTTTCGCCTTCCGAGGCCTCTAACCTTCTTAAAGGAGTCGGTTCGCGTCAATGCCATGGTT  
ATGCTCTCGGCTCCTGCCATGGATCTACCCGAACCCATCGCAGGCGAGACCCGTGAAGAT  
GTTTTTAACCGTCAAATAAAGCTTGTCGACGCCAGTTATCCGGTATCGGCAACGTCGCG  
GCGCCGGGCGAACTCAACGGGGTAGTGGTTTGGGATATTCTCAGAAAGTTGTTGTTG  
TCCGAGAGCTCGCTGGTTTATAGTGTGAAACCCCTGCCACCTGACGCGGCGTGGGGCAGT  
TTCGGTATTCGACCACTCGATACTTCGGGTACTAATTTT

>RXA02652-downstream  
TAGAAGAAAATTCCAGATGCCCC

>RXA02655-upstream  
AATTTCGATGGAGAAGAAAAAGTCATGGGGGTCAGGCTAGGAGAAAATGATCTCATGATGG  
CTTTTGGAAACGGTACCTCGCTCACGAGTTTGGTGAAATTAG

>RXA02655  
ATGAGTCCAGAAGCCAAAGAAGCCCAAGATTCTAGGCGCAACGAGATGCCCCGAGAAAAAG  
CGAGCGGTGCTACGTAAAGCGATTAAGTTGGAATGGGCAACGATCGCATGGGTTCCTTTT  
TCGATCGTTTTTGGTAGGTGTTGTCGCTGGTCAATCGCAGCCATGCGTAGTGCATGGATT  
GAAGACATGCTTTCTTTGGTACCACCTATCGCTTTTCTTTTAGCCTCCCGAATCAGCAAA  
GCTGTGGCAACCAGAAAACATCCATACGGCAAGCACCGGTCGATTGCTATCGGGCACCAA  
GCTGCAGCACTGGCCCTGCTTATCATGCGGAAGCCTTTTAATTTATGAAGCGGTATCTGCA  
CTGATCAAGGGAGAAAGGCCCTCCGATAGGTTTAGCTATTTTATTTGGCCATGACGTGTGG  
TCAGGTTGGTTAATGATCGGGGTATGATTTTCACTGTCGATCCCCGATGGTGATTGTAGGG  
CGAGTAAAAATAAACTTAGCTAAAGATCTCCACGATAAACTCCTCTATGCAGACGCGGAT  
ATGGCCAAGGCTGACTGGGGCACAGCAGTCGCTAGCACAGTAGGCGTGCTCGGAATAGGA  
CTGGGTTTTTTGGTGGGCGGATGCAGTTGCAGCTCTAGTAATATCAGCTTCAATTCTCAGA  
GATGGCGTGATAAATATGAAAGCTGCTATATCTGACTTAGGTGATGGACGAGCCATGACT  
TATGACAATTCGCCCCCTCACCCATTAAATGATGATGTGGAAAAGGCTGCCCTAGAGATG  
CATTGGGTCAAACACGCGCGCTAGGATACGCGACCAAGGCGCTGTTTCCACACAGAG  
TTATTTGTCTGAACCAAGTAGAAGGATACACACCTGCTCCGGAAGAAATAAATCTCTAGTT  
AAGCGAATCCAAAACCTTGAAGCTGCAAGATGTCGTAGCTTCCGTCGTCGAAAAA  
ATCGACCGGTTTCAGGCCCCCTTCG

>RXA02655-downstream  
TAAAACTTAACTGAGAAAGTGAT

>RXA02662-upstream  
CCAAGGTGTCACCTCACCGTTGCCATCGCCTTCATCATCGTCAATATCGCCGTGGACCT  
GCTCTACGTCCGTGGTCAATCCACGTATTAGGAGCATCTAG

>RXA02662  
ATGCGCCGTAAACTAACCACCACATTAGAAAAACAAGCCCGGTGCACGACTTGGTGGCTTC  
CGCGCACTTGCACCAACTTCAAAAATCGCGCTGGTTTTCTTCTCCTGATCTTCTCCTC  
GCGATCTTTGCCCCACTGATTGCTAAATACGATCCACTGGCCTCCGGAATCCAGTCCAG  
CCTCCAAGCGGTGAGCACTGGTTTGGTACCGACGCCATCGGCCGCGATATTTTCTCCCCG  
GTAGCCACGGCGCCAGAGCCTCCC

>RXA02662-downstream  
TGATCATTGGTCTTTTCGCTACG

>RXA02665-upstream  
CAAGGCGACCCAATGGCGTTTAAAGTAACAACCCCCATTGATATGATGCTGGCACAACGC  
ATCACCGACGAAGCCGAACCCACAATATTGAGGTACCAG

>RXA02665  
GTGACTAACCCAATCATCCCCCGGTAGGAATCGCCACAGACGCCCACCAAATCGAAGCG  
GGAAAACCCTGCTGGATCGCCTGCCTCCTCTTTGAAGGCGTCGACGGCTGCGAAGGCCAC  
TCCGACGGTGATGTTGTAGCTCATGCAATTGTGGATGCTCTCCTTTCTGCCTCTGGTCTG  
GGGGATTGGGCTCTTTTCGTTGGTGTGGGGAGACCTGAATACGATGGTGTCTTCTGGTACA  
CAGTTGTTGAAGGAAGTTCGGGAGCTGCTTTCGGCACACGGGTACGTCAATTGGAAATGTC  
GCCGCCCCAATGGTTGGCCAAACCCCCAAATTTGGACCCCGCCGGAAGAAGCACAAACAA  
GTCACTCTCGAAATCATCGGCGCACCATGCTCACTGTCTGCCACCACCACTGATCACATG  
GGATTCACTGGTTCGACGAGGGTCGTGCATCGGTAGCAACGGCAGTGGTGTGGAAGGCT

>RXA02665-downstream  
TAAGTTTCTGTAGGGATTGGGC

>RXA02670-upstream  
CCGTTTAATCAACCGACTGTGTGAATGCGCTTAAACGGACTAGGGTTGTGAGCAGCATAT  
CCAGATTTTCTGGATAAATCCTGGAATTTCTTAAAAACCA

>RXA02670  
ATGGAGGACGAATCCGTGAAGTCCCTGAACTTGGCTGCCCCGTCGTGGCGCGCTCGTGACC  
GTGGCTGCTGCGTCAGCTCTTGCGCTTGATCCTGCAGTGCCGGACAGATCACCAGACC  
TCAAGCCAGGTTGCAGCAGTTGATGGCAACCAGGCAGGCTCCGCGAACGACCCAGTTCTG  
GTGCGTGATGTAACCGTGCACCTCACCACCGACGGCGAAGCTGGAGTAAAGTTCACCGCC  
ATCAACCAAGGACACCTCTCACACTTCTCACACCTTGAGTCCGTCACCGTTGACGGCGAA  
GAGGTTGAGCTTGATGATGCAGAGCCAATCGAGCGCAACTGCTCCCTCGTTGCAGACATC  
CAGTCCGAACTGGATCTGATCGAGGAGCCAGAAGTTGGCTGCATCCAGCACGTAGCAACT  
TCTCTGGAGAACCAGGTTTTCGCATACGGCGGAGTCTGTCAGTTGAGTTCTGCTTTCGAC  
ACCGGTGCGATCACCATCGATGCCACCGTTTCCGCACCTGTCTCGAGTCAGGCGTAGAA  
AACCGCGAGGTCGGCGGAGACACTGCAGAGGCAAGCCACCAC

>RXA02670-downstream  
TAAGCCTCTCAAAGCTGCTTGAA

>RXA02672-upstream  
AGCAGTCATCCCCGAGGCTCAGGCATCAAACAAACAAGCCTGAGAGTCATCGAAGCTTC  
AACACTTGCCGAAGCACTTGACAGCAGTAAGCTTATAAAGC

>RXA02672  
ATGACACCAACAACCACTCCTGTATCAAACCCAGATGCCCTTTCCACTGGAAGTCAGGAT  
GTGCACACCCCTCAAAGGAACGTTGCAGCGCCTCGCCCCAGGCACACCACTTCGCGATGGC  
TTAGACCGCATCGTCCGAGGACACACCGGCGCGTTAATCGTCATTGGTGATGATGAAAAC  
GTCTCCTCGATCTGCGACGGCGGCTTTGAATTCGACGTTTCGTTTGCTGCAACCCGACTC  
CGCGAGCTGTGCAAGATGGATGGCGCTGTCTCTTCCGACCTTGAGCGTATCAAA  
CGCGCCAATGTTTCAGCTGCTGCCTTCACCAACCTGGCCAACCCAGGAGTCCGGCACCCGC  
CACCGTTCTGCGAAGCACCAGCGCTTCACACCGGTGTGCCAGTGATTGCGGTATCCGAA  
TCACAAAACACCATCACTCTCTACGTCGAGGGCAATCCCACATGTTGGAGCAGCCAGCT  
GCCCTGCTTAACCGCGCCAACCAAGCTTTGGGAACAATGGAGCGCTACCGCGATCGTCTC  
GATCAGGTCAATAACCGCCTTCACCTGGCTGAACTCCACAGCTATGTCACCGTGATTGAT  
GTTGTTTCTGTCTTTCAGCGCGAGGAAATGCTGCGCCGAGTGGGTGAAATCATTGATGGC  
GATGTTCTTGAAC TAGGCAAAGACGCCAAGGAGATTGATCCAGCTCAGCGAATTACGT  
GGCGATAATGACCGAGAACGTGAATCAATCATGCTGATTACCTTGTCACCGACGGTATT  
CCTGCAGATGAGGAAATCCACGAGCCCTCGAAGCGATCTCACATTTAGATGATAAGGCT  
CTGCTGAATCCTGCGAACATCGCGCGTGTCTTGGACTGCCACCGACCGAGGAAGCACTT  
GATGAGCCAGTCACTCCTCGCGGCTACCGCACGCTCAACAGAATTCCTCGAGTGCAAAAA  
TTCTCATGGATAAACTCATCGTGGAATTCGGCAACTTGATGCACTGCTCAATGCGTCA  
GTAGAGGATCTAAGTGCAGTCGATGGTGTGGGCTCACTGTGGGCACGCCACATCACCAGC  
GGACTTGGCCGTTTAAGT

>RXA02672-downstream  
TAGGTTAAAGGTCACCGCTGGTG

>RXA02673-upstream  
ACGCCCAAAACGCTAATCCGCTGAACAGGCCGATGAAAGTAATAGAGTGTCTGTGTGGG  
AACGCCGAGACATAATGAAGTCATTTACAAGCGCCGCCGC

>RXA02673  
ATGGCAGCGCTCCTAGTTCTGCTCGTGTGATTGCCCTTGATTATCTGGGCAGTCGTCGCG  
CTTCGAGGTGGATCATCGGAGCCTGAGGAAGAGCAGCCAAATAATGCTGTAGTGACCTCC  
TCAATGGAATCTTCCGCGACGTCTAGTTCTTCTTCTAAAGAATCCACGACTGAAGCCACC

ACAGAAGAAGAGACTTCCAGTGCTGAACCAACCGCAACATCCTCCGTTGCAGCAGATGCA  
 AAAAAAGACCTGTGAGCTTAGTGACTTGGTGATTTCGCAAGCACTAATCAGCCGACTTTC  
 TCAGGTTCTGCGCAGCCAGAATTATTTATGGCTGTGCATAATCCGACTGCTGTTGATTGC  
 GAAATTGACCTCGAGGAGAACAACTCCGTTTCGAGGTATACAATCTCGCGACCAACGCA  
 CGAATCTGGTCTGATGTGACTGCAACCTGCAGTTGAAGACGGCACGAGCGTGTTCCT  
 GCCGGCGAGGATCGCTACTTCCAGGCAACATGGTCTCGTACCACTTCAGCGCCAAACCAG  
 TGCAACAACCGCACTGATGTCCCCGCCGGTGGCTACTACTTGACACTGTGGTCGGTAAT  
 AACCTTCACCAGCGGTGACCTTTAACCTAACT

>RXA02673-downstream  
 TAAACGGCCAAGTCCGTCGGTGA

>RXA02678-upstream  
 CTGTGGGCGCGCAACAGGGCGTCGACATGCTCGCCACCAATTATCCGGACCGTGC GGCG  
 GAGCTTTTGAACGCACATCCCAAGCCCGCCATGTACGCTA

>RXA02678  
 ATGCGCATGGCAAAGAAGACTAAGAAGAATGAACAGCTGCCGGAGGGCATGAGCCGTCGT  
 CAGGCAAAACTTGCAGCCCGCGCGGTGAACGTGCAGCACTTGAGCGTGAACCTCGCCCA  
 TTCGAGGGCCTGGCAATGGAGTCACAGCTCGTTGCACTGCAGGAATTCATTCATCTGCA  
 ACCGCACCCATCACC GTTGCAGGCACCGATCGCAAGATCACCTCTGTACCGTGCTTCCA  
 GGCGCAGCTGCGGCAC TTGTCCGCGAAGAAGCATTCGGCGGCGAAGCGTTTGTGCAATG  
 CAGCAGGCCATCCGCTCCAACAACCAAGCAAGGACCTCGCGTTCGCGCTGAAC TGGGTC  
 ATCAACGCAAAAAGCCGGCGAGTCACTGGCCACCGCCACAGCGGACGGCACCCAGCCAGAG  
 CTAAAGAGCTTGCTTAAACGACGCCGACACCTCGAAATCACCACTCACCAAGACTTCAAC  
 TGGTGGCTGGCGGAAAACGACAACCTCTCCCCAGAAGTTGCGCAGCACATGCAGGCAGCC  
 AATGACTCCATCCTGCCTTACACGAAGTCGAAGCAGACGTCCCAGGCGCTGTTTGGTGG  
 GTCAACCCAGGCGGAAAAGCGCACATCCGTTGGGTCCGCACCGAAAACGAAACCGCACTG  
 TTCAACGCTTTGGCAGCATCGCAGCAGTGGCGAGCTGAATCTCGGCGAAGAACTAAG  
 TTCGCTGGTGCTTTCCGCACCCACGGCATCGTCTCGTCCAGTGTTGGGATCTCGATCCTGAG  
 CGTCCATCCACCGATTACGCCGATGTTTTGGTTGCACTCAACGAGAAGATCGTCGCTGAA  
 CTGGATAACGATGCACAGCTCAACGCCGACGAGCGCCGTCAGCTGGAGAACATCAAGTCC  
 CGCCAGGTGACCATCCGC

>RXA02678-downstream  
 TAAAATCTCTTAAAAACACTTCA

>RXA02679-upstream  
 CACCATTACCACCAGGGCCGCCGCCATCATTCGCTGGCTGCTTCCTGAGTTACGGAGT  
 TAGCGTAGTCATTGGTTGGGTGCGGTAGATGGTGTGAAT

>RXA02679  
 GTGGCCCCATCCAGCGGTGATGACACCGTGCATGTGCGCACCTGCAGAACCTTGCTGGTT  
 AGCGAACTCAATGTAGACCTTTGGGCCACTGATCTGGAAGTAGATGCCGTCGCCGGTGG  
 GGTGTCGTACTCGGTGGCGCCCGGACAGTTGATGTAGGTGTCATCCAGGGTTTCGCGGAT  
 GGCATCGAGTTCAGTTTCGGTGGTTTCCTCATCGGCGAGGCCAACCCAGTTTGCATGAC  
 ATCGATGAGCAATTC TTTTTGCTCATCGGTGAGGTGAGGCTTCAAGCCGGTGCCGGT  
 TGGGTAGTCGCACGTGCTGCCCGGTGCGCACACCATGGAATCCAAC TTTACCCCTGGTA  
 GAGCTGTGCTTGCTGCTCTTCGGCGAGGCTGTGCTAGAAGGCGAAGGCGGTTTCGTACAT  
 GTTGCT

>RXA02679-downstream  
 TAGTGCTGCAACGGTTTCGCCGT

>RXA02680-upstream  
 AATACCAGGTCAACACACACAGGAACCGTTCAGAAAACCTTCCAGATTGCTCACTTTTAA  
 TTTCACTTTTTTGAGAAGTTTTACTTTTATATTAGTTCTC

>RXA02680

ATGCGCCTCAACAAACGACTCCCAGCGGCACCTCTCCGGACTGCTGCTCTCTGCTGCCCTT  
CTTGCCGGATGCTCCACTTCTGGAACCGCCGAGACCACGACAACAACCGTTTCATCTGCT  
GCGGCATCAACAACCACTTCCACCTCCTCTGCTTCGTCTTCCTCTTCCCTCCTCTTCC  
TCCTCTTCTCCGACTCAAGCACCACCGCCGAAACCATCTCCAACACCGCGGAAGCTGCC  
CAAGCTTTCTTGTCACCCGTGTCCACCGAAGAACAAGACGCCGTACTCTACGACTACGAC  
GCCGAAGAAAAGTCCACCGGCTGGTCTAACTTCCCAGTCACCTTCGTGCAGCGTTCCGGC  
GTGAACCTCACCGACCTCACTGAGGAACAGCAAGCAGCTGCCCTCAACGTGCTGAAGAAC  
CTGCTCAACGACGACGCCACCAAATGATCGAAGACATCATGGCTAGCGATCAGTACCTC  
AACGACGAAAGCAACACCACCGAGGATTCCCTCGGCCAGTACTACATCGCATTCCTTCGGC  
GATCCAAGCAGCGACTCCGACTGGTCCATCCAATTTCGGCGGACACCACATCGGCATCAAC  
ACCACCTTCTCCGACGGTGCCATCACCTTCGCCCAACCCACCTTGGCACCCAGCCTTCC  
GAGTGGAACAACGAGGACGGCGAAACCGTTGCAGCACTAAGCAACATGTACGAAACCGCC  
TTCGCCTTCTACGACAGCCTCGCCGAAGAGCAGCAAGCACAGCTCTACCAGGGTGAAGAG  
TTGGATTCCATGGTGTGCGCACC GGCGACGTCGCTGACTACCCAACCGGCACCGGCTTG  
AAAGCTCTGACCTCACCGATGAGCAAAAAGAATTGCTCATCGATGTCATCGCAAACTGG  
GTTGGCCTCGCCGATGAGGAAACCACCGAAACTGAACTCGATGCCATCCGCGAAACCTG  
GATGACACCTACATCAACTGGTCCGGCGCCACCGAGTACGACACCTCCACCGGCGACGGC  
ATCTACTTCCAGATCAGTGGCCCAAAGGTCTACATTGAGTTCGCTAACCAGCAAGGTTCT  
GCAGGTGCCGACATCGACGGTGTTCATCACCGCTGGATGGGGCCACATTACACCATCTAC  
CGCGACCCAACCAATGACTACGCTAACTCCGTAACCTCAGGAAGCAGCCAGCGGAATGATG  
GGCGGCGGCCCTGGTGGTAATGGTGGCGAGATGCCTAGCGGTGACATGCCTACTGGTGAG  
ATGCCTTCTGGCGCTCCATCAAAAC

>RXA02680-downstream

TAACGCCATTTAAGAGGCCGAAC

>RXA02681-upstream

CGAGGCTGTCTAGAAAGGCGAAGGCGGTTTCGTACATGTTGCTTAGTGCTGCAACGGTTT  
CGCCGTCTCTGTTGGTCCACTCGGAAGGCTGGGTGCCAAG

>RXA02681

GTGGGTTGGGGCGAAGGTGATGGCACCGTCGGAGAAGGTGGTGTGATGCCGATGTGGTG  
TCCGCCGAATTGGATGGACCAGTCGGAGTCGCTGCTTGGATCGCCGAAGAATGCGATGTA  
GTACTGGCCGAGGGAATCCTCGGTGGTGTGCTTTCGTCTGAGGTACTGATCGCTAGC  
CATGATGTCTTCGATCATTGGTAGGCGTCGTCGTTGAGCAGGTTCTTCAGCACGTTGAG  
GGCAGCTGCTTGTGTTCTCAGTGAGGTGGTGAGGTTACGCCGGAACGCTGCACGAA  
GGTGA CTGGGAAGTTAGACCAGCCGGTGGACTTTTCTTCGGCGTCGTAGTCGTAGAGTAC  
GGCGTCTTGTCTTCGGTGGACAGGGTGGACAAGAAAGCTTGGGCAGCTTCCGCGGTGTT  
GGAGATGGTTTCGGCGGTGGTGCT

>RXA02681-downstream

TGAGTCGGAGGAAGAGGAGGAAG

>RXA02683-upstream

GACGGTTCTTCTGTCTATGACGGAACTCCTACTTATACCTCTTCATCTAGGTCGGTGGA  
ATCTACCGCGGGGACGATCGCTGCCTCGGAGGAAGCCACG

>RXA02683

ATGACGCTACTGGAGAATAGTTTCGGGGGATCCGGGATCTGATTCTGGGGGTGCACGCTAT  
AGCCTCAATTTCGCTCAAAGTTTCTGAGCAGGCCGCGGCTAACGCCGTCTTAAAGGCCGTG  
CTTAACGACGTCTCCTACCAAGAGTTCGCAGACTCCTCCTACTTAGAAATCACAGGAACG  
CCCTCCGCCGACGGAACATGGGGCATCTCATTTGGCGGACCTTCCGAATCGGCCTCCGTG  
GAATTCTCCGACGGCAGCATCAGCTTCTCCCTGTGACATGACAGTGCCCGCAACACGA  
TTGCCTCAGATGGGCGCATTTTATGAAACCCTGACCGAAGAACAATTAGGCATGCTGGAG  
ACTGGCCTCGCGGTTTCCACCGTGGATTTCGAGCCAACAGGAAATGCTTCTGGACTTGGTC  
TCCAACCTCGATCGGCCTGGCAGATACTGAAACCACTGCGACTGCAATTAGTAAAATCCGA  
GCAACGCTTTCGAGACCTACCTGTTTCGGAACCCCGACGGATTAACCTTGGCGCTTAGT  
GGCCACACGTTGATTTCAAGTCTCCACCAGGGCAGCACCGCGAAAATTACTTACCGC

GATCCAAGCACCCGACACCTTAACCGCCGAAGATCGGGTAGATACCGCAAGTGTGGCTGCT  
GCTCCGCCGGAGGTTGTT

>RXA02683-downstream  
TAGGCGTTTGCCGAGAAATTTTC

>RXA02685-upstream  
TAGCAGCATTTGTGGAAAGAGCTGTGGCATGAGTAGTTCAGTAATGTCACCGCGTCGAAT  
AAAGGCGGAAATACTTATCGTTTTAGCCATCACCTTTGGC

>RXA02685  
ATGAGCGGCTGCGATCAATCCTGCGCCTCATCGACGATCTCCTCGCACCGGTTGCGCTC  
AACGACCAGCAAGTTGCACTGAATGCCTCAATGGCAAACCTCCGCATGGCTGGATCTCACC  
TTGCAATTGTGTTCCGCCGGAGTGCTGTTTTCTGGGGAGCACTAGCGATCTACCTGCTA  
GGTGAACGTTTTTCAGTGGATTAAACCCAAAGACTGGGCATGGGGTGCAGGCCTTGCA  
CTCATTTGGTATTCAGGGTTAATCTTCTACGCCAGTGCTGTTTCATTGTTGGGCTGTCCAA  
CAGGTTGTGCCACACGTTGGAAACCTGGTGGGAAATCCCAGTACTTCTTATCTGGTCA  
GCTGCCAACGCCCTTTGGTGAAGAGATCGTGGTAGTCATGTGGTTTTTCACCAGGCTGCGC  
CAGCTGAAGTGGAGTGTGCCTGCAGTTATCGTGACATCTTCAGTACTACGCGGTTCTAT  
CACCTCTACCAGGGAATCTCTGCAGGCTTGGGCAACATCATCATGGGAGTAGCGTTTCGG  
TACTTCTATCACCGCACGGGCAAATCTGGCCACTGGTAATCGCTCACTTCTTGATTGAT  
GCGGTGGCTTTTGTGGGCTACTCCGCAATTGGCGGGAATTTAAGTTGGTTAGGGCTT

>RXA02685-downstream  
TAAACTGAAGTTCCTATTTTATT

>RXA02688-upstream  
GTGCGGAAGACAGCACGCCCCAAACCGACCAACTAGCTAAGCTACACAAGGCGGACGAAT  
GGGTTCCGCGCAGCAAGCGAAGGAAGGAACTTAAGTAGCC

>RXA02688  
ATGGCCGGCCGATTATTTTGTCTACGACACGGGCAGACTCACAACAACGTCAAACACCTC  
CTGGACACCCGCCACCAGGAGCTGAAGTCAACGACCTGGGCGGTAAACAAGCCCTTGAA  
GTTGGCCACGAAGTAGCCACCTACTCCGGTGAGCGCCTCGCCCATGTGTACAGCTCCATC  
GTGTTGCGCGCCCAACAAACCGCCGTGCTTGCCACCTCTACCTTTGAAAAGCTCGCGAC  
ATGCAGTCCGGTGCAGATTCCACTCGACGTTGTGGAAGGCATTTCAGGAAATCAACGTCCGC  
GACTTTGAAATGCGCGGCGATGAAGAAGCCCACATGAATTACTCCCGCGCACTCAACGGC  
TGGCTTCACGGGGATCCTGCCGCTGGTCTTCCCGCGGTGAGACCTACAAAGACGTGCTG  
AACCGCTACCAGCCGACTCTTGATCGAATCATGGACAGCCACGACCTTGACGACGACCGC  
GACGTTGCCGTTGTGACCCACGGCGCCGTATCCGCATCGTGGCAACACACGCAACTGGT  
GTGGATCCCAACTTTGCGTTCAACACCTACCTGGGCAACTGCCGCTTCGTGGTGTGGAG  
CCAAACGGTAAGAAATTCAGCCAATGGGATGTTGTGCGCTGGACTGACAGCCCACTGCCA  
TGGCAGGAG

>RXA02688-downstream  
TAATTGAGACCAAAGGCTCGGAT

>RXA02689-upstream  
GTGAAGTTCACCCACCTCAGCCAGAGCGCGATCCGCTCCGTGACACTGCAGGAACGACAG  
CATCCGCGGAGGTCGGAGTACCTGTAGAGGAGAACGCTCC

>RXA02689  
ATGATTGAAGTCAGCGACGAACGCTTCGAGGAAGTGGTCAAGTACGCTTCGACCAAGTT  
CCCCAGCAATTCTGGATCATATGCGCAACGTGGTTTTACTCATTGAGGATTCAACCA  
GATTCGCCCTTATATCTTGGGTTTATACCACGGCGTTGCTCTCACAGAGCGCACATTCAAC  
CACGGTGGCCTGCCGATTCCATCACCAATTTATAAAGGTGCGTTGCAAAATTAAGTCAAT  
TCAGAGGAACAAGTAGTGGAGCAGGTGCGGGTGACCGTGCTGCATGAGATTGGGCATTAT  
TTTGGCCTCGGCGAAGAGGACCTGCACAGGCTCGGATACGCC



>RXA02689-downstream  
TAAACGCCTCATTAGGTGCACA

>RXA02690-upstream  
TTTCTTGTACCGAACCGACGATATTCTTTAAAAACATTGGTTACACGCTCCGAAGATC  
TCTGACGTGAACCCATTTTGGTGGCATGATGGTGTCAATT

>RXA02690  
ATGAGTACAAACTTTGACACTTCGACGTCTCCAGAGGGTGAAACCAAGAAGAACTCTTCT  
TTCCGCACGTGCGGCCTCTGTGCAGACCATGCTTGTGACGCTTTGGCAGCAACGGCTGCT  
GTTGGCGTGTACTCCTACAACACGGACAATTCAGCAAACGGCGGCGAATCCCCACAGGA  
CCTGAGCAAAGTACAGTGTCCACCACCGCAACTATTGCCTCATTTACCACTGCTGACGTG  
GGCCAATGTGCAACCTGGGATGTTAACAATGAAGGTCTAGTGTCTGGTTTTGAACAAACC  
AGCTGCGATCAAGAGCACCGCTTTGAAATTTCTGCTCGGGAAAACCTGGCAACTTACCCA  
AGTTCGGAATTCGGTCCGGACGACGCTCCACCAAACCTCACCGTCAGGCGCAGCTGCGT  
GAAGAGCTCTGCCAATCTCCTACCTTGGCGTATTGTAATAACCGTTTCGATCCATCGGGG  
CGCTACACCATCGCCCCGATCCTGCCACCTGCGGAAGCGTGGGCTGCGGGAGATCGCACC  
ATGCTCTGTGGACTTCAGGCAACCGACGCTTCAGGCACCTCACAACTCACCGTCGGACCG  
ATAGCAGCCAATGACCAGGCACGCGTTTTGAACCGGCGCCTGCGTGAAGGTGGAATCC  
TCCGACAGATTCCGCCAAGTTGATTGACACGGAAGATCACCACTCGAATCAATTTTGACA  
GTCAACCTTGGTGTCCCTTTCCACAGGGCGCGCCAGCACGGATGAGCAGAACAATTTTC  
CTCGGAAACACCTGCACCCAAGCATCCATTGATTACCTAGGCTCCGAAGAAAACGTCTAC  
CAATCCACCCTGCAGACCTTCTGGCCAACGATTACCTCCAACCTCCTGGTTGGGCGGTTC  
CACAGCGTGAACCTGCTTCCCTCATGTACCATCCACCGAGGGTGTGCAACATTTAACACC  
CTCAACGGTTTCAGCGACTGGCACATTCACCATCAACGGTGAAGTTCCCCACCTCAGCCA  
GAGCGGATCCGCTCCGTGACACTGCAGGAACGACAGCATCCGCGGAGGTGCGGAGTACCT  
GTAGAGGAGAACGCTCCA

>RXA02690-downstream  
TGATTGAAGTCAGCGACGAACGC

>RXA02693-upstream  
CAGACCAAGTGTTATTTTTGTTGAAAAAATCACATTGTAAATCGAGCAAAACCAACCTAT  
GCCCTGCAGAATTGTGCATGCTCTGCCAAGATGACTCAAT

>RXA02693  
ATGGTTTCGCTCCCCAGACTAGCGTCTCTGCTCACCACCTCGCCTGGCAACGCTTAAACCC  
GCACTAAAACCTGCCACCCACCTCGCCTCCCTCGGCGCGCAGGTCAATTGCAGAGCTAGTT  
CCGGGGATCCGAATGTGCGCAAACCGCAGGCGAATCCTCCCTGCAATATGGGCGCTGGC  
TTTATCGGAGCGGAAATCGCAATGTGGTGGGCTCTCTCGCCGTCATTGTTGCCGAAACCG  
TGGTGGGTACGGCTGCTAACCTGGCTGTTTACAAGCGGTGGGGCATGCGGCAGCGACG  
GGAATCCACTCGATCCTCCCCAGAACCAACCGGCGGGTATCCAGGAAAATTTACAACGCC  
ACCCACATCGCAACTGGTGCCATCACGTTGACCACCACGGTTGTGGGATTGATCAGGCAT  
CGCACCCAAATCCGGCTGATTGGGCAGAAGAATTTTGGACCGAAGGAGACGATCGCGGGC  
ATTAGTGTGCGCACCTTGGGGTACGGCGCGCTGCTGATCACCGGCGAATTAACCCAGCAC  
AGTATTAAATGAGGTCAAGCTCCTAATTGAGAGGTTTTACCAGCGTGATAAGTTTCATC  
GCAGCGTTTTCGGTCAATTACATTGACCACCTTTGACCTTGGCCGATCGCGTTTTGTTGCGG  
CGCATCTTGCAATAATTCTGCAATTCAAGCAGCGCACCTTAATCGCATGGTGTTCACAGGA  
ACTGAGCAGCCGTGGGAGCCGGAGCGTTTCGGGTAGCCCGTGGTTCGTATGAAAAATGGGGT  
GCGGTGGGTTCGAGGGCCGTGCAGTGTGTGCGGGAGGCCCACGCAAAGATGACATCATC  
ACGGTAACCAAGGCTTTCTGACACGGAAACACATGAACCGATTTCGTATTTTATCGGTATG  
GTTCCGGGACGATCCTTAAGCGATCAGGTGGATCTTGTCAATTCATGAAATGCGCCGCACG  
GGAGCCCTGCGCCCGCAGCACCATCGTGATCAACAATTCCACGGGCACCGGCTGGATCAC  
AATTGGTCCGCCCACACCTTTGAGTTCTCTACCGGCGGAAACTGCGTGACAATTTCCATG  
CAATATTCTTATCTTCCCAGTGCACCTGAGCTGGTACAAGGACAACGACGGCCCCATTAAT  
GCGGCGAGAATGCTTATCGACGCGCTCCTCCACGAGCTAGACCAGCTTCCACCGGGAGT  
CGCCCAAAGCTGTTCTCGCGGAGAGTCACTGGGGGCGTATGGGTTGGCTGAGGTGTGG  
GGAGACGTGAAAAGCTTCTTGAACCGCTGACGGCGTCTGCTCAGTGGGGCGCCGCGT

TTTTCGGACGCCATGAATGCGTTGCGCACCCGGCGCGATGCGAGCAGCTCCGAGCGGCTG  
 CCCGTGATTGATAGCGGGCGGCACATCCGTTTTGCGGGCGAGCCTGAGCACCTTGATATG  
 CCGGCTACCTGGCAGTTTCCGCGCATGATCGTGGCGCAGCACGCCTCTGATCCAATTGTG  
 TGGTGAACGCGGAGCTGTTTATTTCGGCGGCCGGAATGGTTGAAAACCTCCAAGCAAGAC  
 CACCAAGATGTCTTTAACCCTTTCGATGGATGCCGTTTGTGCGGCTGGCAGGTGGCT  
 TTGGATTTGTTCACTTCAACCTCCGTT

>RXA02696-upstream  
 NGCTTNAAGAAATAAAGCCCTNCCCAGTTAANGGTGNGNATGGGTACCAGCCCTGTGGAC  
 GCTGTACATNTAAGTCATTNCTGGTTNAGGTGANCTGCC

>RXA02696  
 ATGTCCATGCTCAAGAAGACTAAAGAATTCTTCGGACTCGCTCCATACGAAGCGGAGCAC  
 GAGGATGCTTACTATGCAGATGAACCACGTTACGAGGGCACCGCTGCGTACGCACCTGAA  
 TACCGTGAGCGTGACTACGGCTATGCACCAGAGGCACCAGCCCTGTTGCTCCATCGCCA  
 GCACCTCGCTCTTACCAGTCCACCATCGTTCCAGTAGAGCTTCATTCCTTTGAAGACGCT  
 CAGGTTATTGGTGGAGCATTTTCGCGACGGCGACGCAGTTGTTTTCGACATGAGCTTGCTT  
 TCCCGTGAGGAAGCACGCCGCATTGTGGACTTCGCTGCAGGCCTGTGCTTCGCATTGCGT  
 GGCAAGATGCAGAAGATTGACAGCGTCACCTTCGCTGTCGTTCCAGAGCTGTCCAACATC  
 AGCACTTCCGAGCTCGAGCGCGCCGCACGCATCCGC

>RXA02696-downstream  
 TAAACACACCCCTCGTGGTGTGGA

>RXA02697  
 CCTTTTGTGGTGTGGATCGGCATGCATCATTTCGCAGGATTCTTAGCCACCAAAAAGGGC  
 AAAGACTCCCTTACCCTTAAGCAACAGGTCCCCGCGTCTTTGCCACTGGAGCTGCAGGT  
 GTTGCTGTCACTGGTGTGTTGTGTCAGTGCATCACTTGGGCGTCTGGCGCTTCGTGGGGC  
 TGGATCAGTGAGATCAGTGGCAACAGCAAGGTAATCAACCCGCTGGCTTTCCCTTCTTTG  
 GTGGCCAGTGATGATCACCATGGTGGCTGAAGTGTTTCGTTGACGATTTTCGACTACAACGCA  
 GTGGTTAATGTTGTGCGCTCAATCTCCATGCTGATCATGCTTGGCGGGTGGTTCGTATGT  
 TGGTGGCTGTTCCGCCAGAACGACGAGGGCGTCACTGGTACAGCGGCGGCTTATGCC  
 GTGGCTTTTGTGTTCAATTCTGTGACCTTGCCGTTGCTACTACGCCAGCTTGATCTCTTTG  
 CTCGGCACATTTAAACCACCGATGTGGTTGATTTCGCTTCGCAGCGGGTGCTTCGGTGT  
 ATCGCGCTGATGTTTACCAGGAGTGGAAACCACCGCTGTACAACATCGTTACGGTGATC  
 ATCGCAGCAATTATCGCGTGGCTTGCCACCGTGGTGATCTTTGATGACACTGACCCTGCA  
 ACAACGCCACGGAGAAACCCTCCCCGCATACCGTTTCC

>RXA02697-downstream  
 TAGTTGCATAAGGTAAACCGCCA

>RXA02700-upstream  
 TGACAACCTGATGCGGACGACAACGATCGAATTTATAGTCAAACCCCTCGTGACGCAGCG  
 AAGTCTCGGTAGGGGAGAAAGTTACAGTAAGGGCGTTTTTA

>RXA02700  
 GTGGTTCCCTCGTTGCAGCAATGGCGAAAACCTGCTCTCATCTGGCCATTTTGACGGTG  
 CTAGGCGTACTCCTGACCCATTGGTTTCGCTGGCCACTCACCTGGCCGCTGGGGCTGCGT  
 CTTCCCGTTGATGTAGAGGTGTACTGGCAGGGTGCGCGCGAGTTTTGGCTCGCCGATGAT  
 CTCTACGACATCAGGTATGACACCACTTTCGACAACCTTGCCGTTACCTATCCCCCTTTC  
 GGTGCGTTGGTGTTCACCCCATTTGTGGTGGATTTCATGACCTCTTTGGTCTTCTCGTCACC  
 GAACGTGTCTTCGCGCTAATCACGCTGCTCACCACTACGCTGTGGCAGTTTTCTGCTC  
 CGCTGGCCGGCGTGCGCGATCGTGTGTGGGAATTCGTGCGATTTCGAGCCCTGCTCGTG  
 TCCGCGCCGGTGTATTTCACTCAATATTGGGCAAATAAACGTCATGCTCATGGCTTTA  
 ACGCTTTTCGACGTCGCCCTCCCCCGCAGCACGCGCCATTACGGCGTGCTCAAATACGTG  
 CCACTCGGCGTACTCACGGCATTTGCCGCTGCGATCAAATAACCCCACTAGTGTTCGGG  
 CTGTATTTCTCATCTGTGGGTGCTGACTAAATCACACGCGGACTGTTTGAATGATT  
 GGTGGCTTCTCGGGGCATCCGGGCTTGCAATTATTTCCGACCATCCATTAGCATCCAA

TATTTACCGACGTGCTGTTTACCGCAGAACGCATCGGCGACCTCCACTTCGCACGCAAT  
GTCTCCATCCGTGCGGTTTGGAACTCCCGAACTTGGTTCCGCAGCATCTATCATG  
TGGCTTGTGTGTGGCGCTAGTGATCATCGCAGTCGAGTTGCTGCTTACCGAATCCTG  
CGGACGGATCTCTCCGCGCACAAATCGTCTGCTGGCTGTTCCCTCGTGTGCTCGTTGCA  
CTGTTGTGCTCCCCCGTCAGTTGGTACCACCACTGGGTGTGGCTTGGTCCGTTAATCGTC  
GCTCTCTGGCTAACTCAACACCGCTGGCTGGCTCTATGGGGCGCATTCGCCGTGACATTC  
GGATCATTCCACAATTTCCCTACCCTCAGAAAACAATATGGAGCTCACCTGGCCGTGGTGG  
ATGCATGTCTCGCAGCACATTATTTGATCTTCTCCGCAGTGGTTACTGCCGTATTTAGT  
TGTGGGAAAATGCCCCAAAAACAGAGCTTTCCAC

>RXA02700-downstream  
TAATCGATCAGGAGTATCACATC

>RXA02701-upstream  
CCCACTAATCGATCAGGAGTATCACATCTCCATGATTTAAGATTAAACTTTGTCTAAAC  
ACGAACGGTGTTTTTCATGTTTAAGAAAAGGACTCCTGGTT

>RXA02701  
TTGACGAACCCCCAGACAGCACATGCTGCCGCGTCTGACTCCGCATCCCAGAAGGAGGCT  
CCTAATCCTTCACTCTCCATCACTGTAGGTATTAAAGATCTGCTGGGGCTGCTTTCAGTT  
CTTGGCATTGACAGCGGGGCTGATAGCCAACAAGATTCTCATCGAACGCTACAAC'TGGCGC  
ATCGATGCCGAGTTTACCGCGAAGGCGCGTTAGCGCTGGTCAACGGGGAATCACTGTAC  
GCGCAGCCGTTTATATGGGTGATATTTCACTACCCTTTATCTACCCACCGATTGGTGCC  
ATCCTGTTTTCGCGCTTGGGGGTACTTTGATTTTCATCACAGTTGAACTTGCGGGAAACCTT  
GTTGTCTATAGGCTCATCCCTGCTGTTATTACTGTGCCTGTATCTTGTACCAACGCTGTT  
CTTAGCGGTCGAGACAAGCTGTTGGCCTTACCATCGCTGCGATTTCCTGGCCGATCGCT  
CTCTTTGACAGCCAGTGT'TTTTGAACGCTGACTTGGGCCAAATCAACATTTTGATCATG  
GCTTTGGTTGTCTATGGACCTGCTTCCGATTAAAGCGCAGAATCCCCGAGGTGTCTGATT  
GGCCTTGCAGCCGCCATCAAAATCACTCCGCTGGCCATGCTGTTGTATTTCCTGGTGAAG  
AAGGATTTCCGCGGAATCATCAATGCGGTGATCTCACTACTTGCCTTCACTGCTATCGGT  
GCTGTGCTCGCATGGGAAAACACCAAAGAGTTCTTCTCTTCAACCCCTTCTCAACTTAAGT  
GCTGAAGGCGATTTCAGGCGTAGACACCACGTTCCAATCCAACAGCTCGATTTCAGGCCATG  
CTGTATCGCTGGTGGACCTCAAAGGCAGATGCCGAAGCATCCTCACTGCCACCACCTTG  
TGGATCGTACTGTCCCTGATTGCTGTGGCGGCCGTTGCCTACCTAATGCACCAACTCTTC  
TCCAGAGGATTGCACGTTGAGGCAGTCATGGTTAACGCCATGCTCATGCTACTTATCTCC  
CCCATCTCATGGTCTCACCACCTGGGTGTGGCTACCGCTGTGGGCTGTGGTGTCTTTCGTT  
CGACACAAGCTGGGCTCTCAGCAGGTTATGTCCGTGCGTGGTGGAGCGGAGTTATCTTGAGC  
GTCATGCTGCTGATGCTGCCACCAAAATGGTGGTTTGGCCGCGATGGCGTCAACGCTTTC  
GAACTGAATTTCTGGGAGAACTACTCATCTCTGACTGGACGTGGCTCTCCATCGGGCTC  
ATGATCACCTTGGGTCTTGGGCTGAAAGCATTTCCTCAAAATATCCAAA

>RXA02701-downstream  
TAGATAAAGGTGTGG

>RXA02712-upstream  
CTGAAACGGCTTCGGAAGCTGAAATTGAAGAAAACCCACGTGCCGCACCTGTGAAGGTGC  
GCGCAATCGAAAGAATCGGCAACAACCTCAGGAGACCTCTC

>RXA02712  
ATGACCATGACAAATGGCTCCCGCACAGAGTCGGGAAAGATTTCGCGATCGACGTGTGCT  
GACGCTGATCCACGGTATGGCCGTCGCGTCTCGGTGAGTAGGGATTTCTCCACAGCGGAA  
GCTTCGGGGAGGGGCGCGTCGATAAGCACGCAACCTCGTCGTGACATGGCGCCGAAAGG  
CGCCACACAACCCGGGCCCCCTAGTGAACCCCTGGCGTGCAACCAACGCGTAAGCGTTTGATG  
CAGCACAAGCTGGGCTCTCAGCAGGTTATGTCCGTGCGTGGTTCGCCGCTTGAGGCAAAA  
CGTGCTGATCCTAAGGTGATCCAGCTGTCTGTGCTGGTGGTTATCCTGCTGTGCGTTGGT  
GTTGGCGCGACCATGGGTCTGTCCGGAACGCTTACACAGCAGACTTTCCAGTTGCAGGAA  
CTTCAGGCAACTGAAACGGATTTGAGCAATCGCATTGAGTCGCTCAACCGAGATGTGGAA  
GATGCTCGCTCAGCAGCAACCTTGGCAGCGAATGCTACGGAGATGGGCTTGGTATCCCCA  
GTGGAACCTGGCGTGCTCGCAGTGCAGGAAAACGGTGATGTTGTGGAGGAGCGCGAAGCA

AATCCAGAGACACGCCCTATAGTTGACATCAATGGACAACAGACCCGACCAAATCGGGCA  
TCAAGCAACCCTGACGAGACTAACGCAGTGACTGAAAACCTCCAGGCGATTCCACAAGAA  
GCAGCAGCTCCGCCGTATCAGACCAACACTGTTTCCTTATGCTGCAACCACCGGACAAGCA  
GGTGGCGCAGGGCAG

>RXA02712-downstream  
TGACTTTCCTCCAGCAATGGCAGA

>RXA02714-upstream  
CGCGGTGGTCTTGATGAGAGGCCACTACGCACCCTCAGAGACAACTGAATGGTTGGTT  
CTGTTTATGCCACTGAGTTGCTGGGAAGGGGACTTCAAGG

>RXA02714  
ATGTTCTTGGTACCTATACCCCGAACTCGATGACAAAGGCAGGCTGACTCTTCCAGCA  
AAGTTCCGTGAGGACCTTGCGGGGGGATTGATGGTCACTAAAGGTCAAGACCACAGTCTC  
GCGGTTTATCCGAAGGAAGAATTTGCAGCAAGGGCTCGCAAGGCAGCTGCAGTTTCTAGG  
ACAAACCCTGAGGCTCGTGCGTTTATCCGAAACCTTGCAGCAAGCGCGGATGAACAACGA  
CCCGACGGCCAGGGGCGCATCACCCCTTTCGGCAGCGCACCGCACATATGCGGGGCTGACA  
AAAGAGTGTGTCGTTATCGGTTTCGGTGGATTCTTCTGGAGATTTGGGACGCTCAAGCCTGG  
GCCGCGTATCAGGAAGAGACGGAGGCTGCCTTCTCAGCAGCTGAAGATGACGTCCTTGA  
GGATTGCTC

>RXA02714-downstream  
TGATAGTTGGGCAATGCTTCGAA

>RXA02715-upstream  
GTTTTTGTGCTTATTGGCATAACGGGGAACATTCTGGATATTCTGGGCGTTAATAAGGCA  
TAGAAGAAAAAATGTCTCTACTAACCACCGGGAGGACATC

>RXA02715  
GTGTCGCTTTCAGAGCAGGAGCAACGCGCACTGCGCGAAATTGAGCAAGCGCTCATGGCA  
GATGATCCGAAATTTGGAAAAGCGGTTGCAAGTAACAATGGCCTAGCAGGCGGTGGGTTT  
ACCCTTCGGGGAATCGCACTTTTTCGTACTCGGACTTGTCCTTCTTGTGCGGCGTCGCA  
TTAAGCCAGCAACATTTGTGGTTTCGTTGCGCTCGGAATTATCGGATTCTTAGTCATGTTT  
GGATCGGGAGTGTGGATGCTGCGCGGGGGCGGCTCCAACAAAATCTCCGTCACATCCCGC  
ACTTCCAATGCGAAGAATCGCCAACAGGGCAATTCCACCATTGGGGACAAAATGGAAGAA  
AACTTCCGTCGACGATTCGAGGGCAATAAG

>RXA02715-downstream  
TAAGAAGTAACTGAATAAGTCTT

>RXA02719-upstream  
TTTGGCTCACCTCGATGATGTAGACATCCCCGATGAGGTGCGCGCACAGTTGCGGGCACT  
GGCTATCCGCTCAACCGAACGTCGGATGTAGTAGACGCGT

>RXA02719  
ATGACACTTTTCAACGTTTAACCAACCCTGTAGTGCTCGGCGGCCTAGCAGGTGTTTGG  
CTTCTGCTCGGCTCTTTTCGGTGGCGGTGCCATTTCGGTACCGTGGCGGAGTGCTCGATGCG  
TTGGGGCTTAACCTTCCTTGCTTTTGGCCACGCGCAGGGTATTTCCAATACCGTGTTGTGG  
GTTGGGCAGCTGCTGCTGATTGGCGCGTGGGTTTACCTTGGACGTCGGTTGTTCAAGAAA  
AAAGTCGCTGATGACACCGCAGACGCTGCTGACTTAGGTCTTGTAAAGCGCACGTTGTAT  
GCCATGGTGGTGGCCCTCATTTTTCGGGCACCAATGATGTGCGGTGATGTTTATTCCTAT  
CTCATGACAGGGCGGATGCTGCGTGATGGCTTCGATCCCTACACTGAGGGCGCTGCGGTA  
AACCTTGGCCCCATGTTGCTTGAGGTCTCTCATGATTGGCGCAACACCACGACGCCGTAT  
GGTCCACTACACCTGTGGATTGGAGACATGATCACCACGGTTGTGGGCGATAATGTCACC  
TTGGGCGTTCGCTTACAAGATCTTGTGATCATTTGGCCTTGCTGTGACAGGCTGGAGC  
ATTGTCCGATTCACACAACATTTTGGAGCCAACCCAGCAATTGCATTG

>RXA02720-upstream

CCACGCTGCACCATCGAAGACGAAGATCTGTTTCTTACCGCCGCGAAGGCACGACAGGC  
CGCCAGGCCGCGTGGTGTGGCTGCCAAGGAGGCATAAA

>RXA02720

TTGGAGCGCCGCGAAGAGCTGCAGGTACGACTGCAGCAGGTGCAAGCGCGTATCGACGCG  
ACCCTCAACGAACACAACCGCCCCGAGGGCAGTGACGTCTGTTGCCGGTCACCAAATTC  
CACCCCGTGGGAAGACATCAAGATCTTACAAGAGTTTGGTGTACCCGACGTGGGAGAGAAC  
CGCGAACAAGAAGCACGCGCCAAAGCACTCGAACTTCCCGACATGGACTTTCATATGATT  
GGCCAAATCCAATCAAAGAAAGCCAACTCGATCGCCAGGTGGGCAGCTGCAGTGCCTCC  
GTTGATAGCGAGAAAAATCGCCGAAGCATTGGGCAGGGGAGTAGCCCTTGCAATTGGATAGA  
GGCGACCGCACCAAGTACGAGCTTCCGTGTTTTATTCAACTGAGTTTGGATGGTGACCCG  
AGCCGAGGTGGAACCTCCATTGAGCCAGGTACACAACTTGCCGATTGCATCAGTGACACC  
ACACATCTGCGTTTTGAGGGCCTCATGTGCGTCCACCGCTTGGTTGGGGCCCTGAAAAA  
GCTTTTTTCCAGGCAAGAGACGTACTTTCAGGTTTAGAGGAACACTTTGACAGGTCTTTG  
GAATTTTTCGGCAGGTATGTCTGGAGAC

>RXA02721-upstream

CCGTGATGATCGTCTGTGACGATCGCCGCGATGACCGCGGAGACGACCTGGATGTACCCAG  
CTTCTCCAGTAATTAAGAAGGAGAATAGACTTATCCACT

>RXA02721

ATGGATAGTCTTGACCCCCGCAACCGCCCCGTCCGCAAGGTCTTACGACCCGTGCCGGC  
GGGGTTTCGCGAGTCCCCGTATGCTTCCTTCAACCTTGGTGATCACGTCCGGCGACGATCCT  
CAAGCTGTGGCATCCAACCGCAATCGCTTGGCTGACATCATCGGTTTGTCCCCAGACAAG  
GTGGTGTACATGGAGCAAATTCATTCCAATACCGTCACAGTCATTGATGAAGCCCCAGCG  
GATGGCCAGGCTGTAGAGGCCACCGATGCGCTAGTGACCACGCAACGAGGGCTAGCGCTG  
GCCGTTTTGGTTGCTGATTGCGTGCCAGTGCTGCTGTCAGACACCGACGCTGGCGTGATT  
GCGGCAGTGATGCAGGCCGATGGGAGCCCCGCAATGGCATCGTAGCTAAAACCATTTGCG  
AAGATGGAGGAGCTCGGCGCGAAACCCAGCCGATTCATGCGCTCATGGGTGCAGCGGCA  
TCGGGTGCGAACTACGAGGTCCAGAGGCCATGGCGCGCGATGTGGAAGCCAACTTCCA  
GGTTCCATTGCGCGTACGACAAAAGGCACACAGGACTGGACATCCGCGCAGGGCTGCTG  
CGTCAAAATGCTCAGCCTGGGTGTGAAATGATTGATTCTGATCCACGCTGCACCATCGAA  
GACGAAGATCTGTTTTCTTACCGCCGCGAAGGCACGACAGGCCGCCAGGCCGGCGTGTTG  
TGGCTGCCAAGGAGGCA

>RXA02721-downstream

TAAATTGGAGCGCCGCGAAGAGC

>RXA02725-upstream

GAAAGCCCGCTGCACATCGGTGTGGCGGGTTTTCTCATGCCAGATATTGACCTTGTCAC  
TGTGTCAAGGCATTGAATAAGTGCCATGAACATAAGTGCC

>RXA02725

ATGGACAACCTTCAACATTCAAATGCATCTATCCGTTTACAAGCAGCGTTGGCCGCGAGGA  
ACTGCTGAGGACACCACTGCGATCGATATTCTTTGTACCGCAGTGGGGTAGAAGAAGAC  
TTCTTTGTGCGCGACATGATAACGTGGGCGCTCACCCGCATGCCAGTTGATGACGTGTTT  
ACCTCACTGGTTCGCTGATTTGGATTCTGAGGTACCTGATCGACCATTCGGTGCAAGTCAA  
GCACTCCACACACTCTCCAAGTTAAGGGTCGCGCAGTCGTGGCAGGAATTGCAAGCACGG  
CCTTGGCTTTTGCACCGGGAGGACACCGCCAACTGCGTGGCGAACCTTTGTGGGACTG  
GTCCCAGATGATCAGACCGCATGGTTGGCGCACCAATTGCTCCAAGAATTGGATAAAGGA  
ACGCCGTGAAATTCAGCGGAGTTTAAGTCGGGCGATGGCGGAATTGGAGGGGAGGGAGCGC  
TCGATAAGCGTGCTTCTAGGCGCTTTAACGAGCGCGCACGCGGTGGCCACCGCCAAGCTC  
ATTGCGGATCCGGAATCCGATTTTCATGGCTGATCTGGAGGAAGCGCGGCGGTGGATAAT  
ATGGGTGCATGC

>RXA02725-downstream

TGATCGGTGAGGTGTCCAAGCTC

>RXA02727-upstream

GATCAGTTCCTAGATCTCGTTGAGGACGCCCTCGTTTCAGTTCCAAGAGGAAAACGAAGAC  
CTAAAGCAGCAGGTTCGAAGAGCTAGAGGCGCAGGTTGCCG

>RXA02727

GTGGTCCCTTCTTCCGCTGCTAGTTCTCAACTGCAGGTGCAGCCACAGTTGCAGCTTCCA  
AGTCTGTTGACGAGGCAGCGCTGCGCAAGGAAATCAAAGAGAAGCTGCGCTCCGAATACG  
GCATCCAAGCTCGATGATGCCTCCAAGGCCGCTCAGAAGGCTCAAAACGATGCGAAGTCC  
GCTCAAGATCAGCTACAGCGTGACAAGCTGACGCAAAGGCAGCTCGCGACGAAGCTGAA  
AAGGCCAAGGCTGAAGCTAAGTCAGCAGCATCCTCCAGCACCACTAAGGCAGCAGCGGTT  
GGCGCTGTGCGCGCTGGCACCGGAGCAGAGTTGCTACAGGTGCTGCAAATGTGGACACC  
CACATGCAGGCAGCGAAGGTTCTGGGACTCGCACAGGAAATGGCAGACCGCCTGACCTCA  
GAGGCTCGCTCCGAATCCAAGTCCATGCTGGACGAGGCTCGCGAAGCAGCAGAGAAGCAG  
ATCGAGGAAGCAAACAGCACCTCCAACCGCACTCTGGAAGATGCTCGCGCAAACGCTGAG  
AAGCAGATCGCTGAAGCGCAGAACCGCGCTGACACTCTGGTCAACGAAGCTGACGCTAAG  
GCTAAGAACCTGGTTTCCGAAGCCGAGAAGAAGTCCGCAGCCACCTGGCCGCATCCACC  
TCTCGTGCGAAGCTCAGATCCGTCAAGCCGAGGACAAGGCCAAACGCCCTCCAGGCAGAC  
GCAGAGCGCAAGCACACCGAAACCATGGCTGCAGTCAAGGAACAGCAGAATGCTCTGGAG  
ACCCGCATCGCGGAACTGCAGACCTTCGAGCGTGAGTACCGCACCCGCTCTGAAGTCCCTC  
CTCGAGGGCCAGCTGGAAGAACTCCACGCACGTGGCTCCTCTGCACCAACCAACAACAG  
CCATCTGGTGAG

>RXA02727-downstream

TAAAAAGAAAGATTAGTTATCTT

>RXA02734-upstream

AATCCTATCCCTAAAAAGTTTCTAACAAAAGTATTGCACTTACTTTTTGATAGTGCTATC  
TTCAGTTGTGTACTTGAAACACACACGAATGGAGCAAGAA

>RXA02734

ATGCGTATTGCAGTAACTGGAGCAACGGGATCTTTGGGTGGACATGTTGTGGATAGTCTT  
CTAAACAAGGGCGTCGCAGCATCAGACATCGTTGCCATTGTTTCGAAATGAAGAAAAGGCA  
GCAGACCTCAAAGCCCGTGGAATCGCTCTTGGTGTGGCTACTTTTGAAGACGAAACGGCA  
CTGACTGCAGCTCTTGAAGGTGTGGATCGCCTTGTGTTTATCTCTGGCAGCGAAGTGGGG  
CAGCGCGTTGCGCAACACCAATGTCTATCAATGCCGCTAAAGCAACTGGCGTGACATTC  
ATTGCATACACCAGCTTGCTCAACCTTGGTCCTCAAAGCTTGCACTTGCTCCAGAGCACA  
TTGCAACCGGAAAAGCTCCTGGCA

>RXA02735-upstream

GAGGAGCTTCGCCACATGGATCCAGATTTGGGCTACCAGCACGCACTATCCGGCTTGTC  
AGCGTCAAGCTGGAAACCGTCTAAGGAGAAATACAACACT

>RXA02735

ATGGTTGATGTAGTACGCGCACGCGATACTGAAGATTTGGTTGCACAGGCTGCCTCCAAA  
TTCATTGAGGTTGTTGAAGCAGCAACTGCCAATAATGGCACCGCACAGGTAGTGCTCACC  
GGTGGTGGCGCCGGCATCAAGTTGCTGGAAAAGCTCAGCGTTGATGCGGCTGACCTTGCC  
TGGGATCGCATTCATGTGTTCTTCGGCGATGAGCGCAATGTCCCTGTCAGTGATTCTGAG  
TCCAATGAGGGCCAGGCTCGTGAGGCACTGTTGTCCAAGGTTTCTATCCCTGAAGCCAAC  
ATTCACGGATATGGTCTCGGCGACGTAGATCTTGCAAGAGGCAGCCCGCGCTTACGAAGCT  
GTGTTGGATGAATTCGCACCAAACGGCTTTGATCTTCACCTGCTCGGCATGGGTGGCGAA  
GGCCATATCAACTCCCTGTTCCCTCACACCGATGCAGTCAAGGAATCCTCCGCAAAGGTC  
ATCGCGGTGTTTGATTCCCTAAGCCTCCTTCAGAGCGTGCAACTCTAACCTTCCTGCG  
GTTCACTCCGCAAAGCGCGTGTTGGTTGCTGGTTTCTGGTGGGAGAAGGCTGAGGCAGCT  
GCGGCGATCGTCAACGGTGAGCCTGCTGTTGAGTGGCCTGCTGCTGGAGCTACCGGATCT  
GAGGAAACGGTATTGTTCTTGGCTGATGATGCTGCAGGAAATCTC

>RXA02735-downstream

TAAGCAGCGCCAGCTCTAACAAG

>RXA02736-upstream

CAGAGGATTACCCAGCGGGTACGTGGGGTCCAAAGAGCGCTGATGAAATGCTTTCCCGCA  
ACGGTCACACCTGGCGCAGGCCATAATTTAGGGGCAAAAA

>RXA02736

ATGATCTTTGAACTTCCGGATACCACCACCCAGCAAATTTCCAAGACCCTAACTCGACTG  
CGTGAATCGGGCACCAGGTCACCACCGGCCGAGTGCTCACCTCATCGTGGTCACTGAC  
TCCGAAAGCGATGTCGCTGCAGTTACCGAGTCCACCAATGAAGCCTCGCGCGAGCACCCA  
TCTCGCGTGATCATTTTGGTGGTTGGCGATAAACTGCAGAAAACAAAGTTGACGCAGAA  
GTCCGTATCGGTGGCGACGCTGGTGCTTCCGAGATGATCATCATGCATCTCAACGGACCT  
GTCGCTGACAAGCTCCAGTATGTCGTACACCCTGTTGCTTCTTGACACCCCCATCGTT  
GCTTGGTGGCCAGGTGAATCACCAAGAATCCTTCCAGGACCCAATTGGACGCATCGCA  
CAACGACGCATCACTGATGCTTTGTACGACCGTGATGACGCACTAGAAGATCGTGTGAG  
AACTATCACCCAGGTGATACCGACATGACGTGGGCGCGCCTTACCCAGTGGCGGGGACTT  
GTTGCCTCCTCATTGGATCACCCACCACACAGCGAAATCACTTCCGTGAGGCTGACCGGT  
GCAAGCGGCAGTACCTCGGTGGATTGGCTGCAGGCTGGTTGGCGCGGAGGCTGAAAGTG  
CCTGTGATCCGCGAGGTGACAGATGCTCCCACCGTGCCAACCGATGAGTTGGTACTCCA  
CTGCTGGCTATCCAGCGCCTGGAGATCGTTTCGACCAACCGGCTCGATCATCATCACCATC  
TATGACGCTCATACCTTTCAGGTAGAGATGCCGGAATCCGGAATGCCCCATCGCTGGTG  
GCTATTGGTTCGTCGAAGTGAGTCCGACTGCTTGTCTGAGGAGCTTCGCCACATGGATCCA  
GATTTGGGCTACCAGCACGCACTATCCGGCTTGTCCAGCGTCAAGCTGGAAACCGTC

>RXA02736-downstream

TAAGGAGAAATACAACACTATGG

>RXA02744-upstream

GCCAAAACGTCATGATTCGCTCTTTGGATACGGGACACCGCTCATTGGAAGATGTCTTCC  
TGGACATCACCGGAAAAGAACTGAGGAGTTAACGCACACC

>RXA02744

ATGTCTAAACCTTTTGAAAACCTCTGCGCTCCGCGGTTCTTCTCGATTCCCAGCTGGAACG  
TTCACCCCTGCTCCCAAACGAGCCACCCCGGCAAAAATGTTGGCTGCTCAGGGCAAGATG  
GAATCCCTGCTGTTTCTTCGCCACGGCGAACAGCAACTGCTCAGCATCATCATTCCCTTG  
GTCGCGTATCATCGCACTAGCGAATTTTGATTTTCATCCCTGGTGAGAACTCCCTCGACAAG  
ACTTTCCCTTCGCGCTGGCCACAGCAGCCATGAGCGCTGGTTTACAGGTCAAGCCATC  
AGCCTAGCTTTTGACCGCCGCTATGGTGCCCTCAAGCGCACCGGCGCCAGCGGTGTTCCC  
GCCTGGACGATTATTTTGGCAAAGTCATCGCAGTCATTGCAGTCACCATTGTGCAGATC  
ATCTTTCTCGGTGTGACTGCACTGCTGTTGGGCTGGTCCGCACCTGTCGGTGGTGTGCTC  
TTTGGCATCGTGACCCTATTTGTGGGTGTTTCCAGCTTCACCGCGCTCGGCATGCTGATG  
GGCGGAACGTTGTCTCCGAATTGGTATTGGCACTGGCTAACTTGATTGGATTGTACTG  
TCCGGCCTTGCAGCATGGGCGGTCTTTTCCCTTCCGTCAACGCTGAAGGAGTGCTGTCC  
ATCATCCCATCCGTTGCGCTGTCCCAAGGTATGGTTGACGCATTCAACGGCGAACTTCCG  
TGGCTCCAGCTAGGAATTTTGGTGGGCTGGCTAATTATCACCGGCGTGGCCGCAACAAG  
CTATTTAACTTCTCTGCGAGCCGC

>RXA02744-downstream

TAGATATACCTTAGTTCGAAAA

>RXA02751-upstream

GGTGTCTTCTTGTCAAATAACCACTGTTTATAGGGCAATTCCTTTGGCAATGTACCCAAC  
CATTACCCACCTGCTGATTCAAAGAGTAGATTTAAATAGT

>RXA02751

GTGCTTCCGATTGCCTCCGGTAACGATGACCGGAATTTAATCCGTTATGTCGACGGTGGT  
CGATTTGATGAAATCATGCTCACCGGAGACCTCACTGGCCTGAGCAGTTTTCTTACCAAC  
GCTGGCCCGAACGCCCGGGATGATTTTGATCTCACGGTGCTCATGCGCGCTGCCGAGGCA  
GGCAACCTCATGGTTGTTGCCCGCTTGTAGATTTAGGTGCCAATCCCCGACTCACCAAT

CCTCGTGGTGTACAGGCCCTACATATCGCAGCGATCGCCGGGGACGATGGCATTGTGGAA  
TGCCTCATTGATGCAGGCGCTGAAGTCGATGCTGTAGATGATCAAGGTCGCACTCCCCTA  
TGGAACGCAGCGGCTCATCATCTGCCTGATTCTGCGGTGGTGGATGTGCTGCTTCGCGCA  
GGTGCGAATGTGAATCTGCGCGATTGCAATGGAGTCAGCCAGAAGACATGCTG

>RXA02751-downstream  
TAGAAGCATTCTTTAGCAGGATT

>RXA02753-upstream  
AACTCAATATTAAAGTCGCGTAATTAGTGTTATATTAATTACGCGACTTTAATAGTTTTC  
GAATACGTAGATTCTCGAAATACAGCAGAAAGCAGGGGTT

>RXA02753  
ATGCTCGATTTCATTGAAAAATCGCTTCACCAAAGCGAAAGGTTCTCATGGAGTGGGGGAG  
GGGGCTGTTTCTGGCGATGCAGCAGTAAAGCCACTGCGCAAAGAAGAACGACTCGCCTCA  
GTCATTACAGGAAACCGAACAGGTGCTGCAGTCGAGGTCATGCGTCGCAATGACGCATTC  
GCTTTGCCAGGTGAGACCGGTTGGGTAGTCATGCTGTTGCCAACTCACGATTACAAATTC  
GGTGGGCTCAACGCTAAGGAAAAGAACCGCGAGGATAAAAGGCACGATCATCAACCTGGTG  
GTCAACGATGATATTCATTCCGTTGTCACTCCAGAACTTCTTGACAGCGATGTGCTTGGT  
GTCATTCTCGATGACAGATTCTTTCGATCGCATGGATGAGTTTGATTACTGCGTAACAAA  
GCACGCTGGCAGTACGGAGTGGCTGCAATTGAACCTGACACGGGTGAGCTGGTGGTGT  
AAGGTGCCCCGCAAAAAATAGCGCTTCGGCACGCGGTGACATTTTTCGAGGTGCGCGAT  
GTGCTTAGCGGTGCTGCTGACCTCGAAGACGTGGTTGATTTTGAGGTCATTGCCACCTTC  
CTAGAGGTGCTGAATGAGACCTCTGAGGTGGATATTGATGACGAAGATGGCGACGTGCCT  
TATGGTCTTGAGGGTGCTCAATGCAGCGGGAGTTATCACGGATGACCTCATTCGCGAGAAG  
CTTGATGTGGATTCCATCCGAGCAGTGCAGAGATCATTGACAATATTGTGCATGTGTTTC  
ACCAAGTTGCAGGGCAAGCATCATGTGGCACACAGCCGGTGCTTCACAGCGCAGACGTA  
GTGGATGTGATGCACAGGAGTCCCATGACACAGTGGTTATTGAGAGCCCTGATGATGTC  
GCACATGAGCAGAACAGGTGGATGTACCGGATTTCACTGATGGATTGTTGATTGACGATGCC  
GAGGTTACTGAGCCAGAGGATGAGGAGGTTGTGCAAGCAACAGCTGATGCAGATCCTTTT  
GGTGATGTAGCAGAAGACGATCCTTTCGGCAGTGATGATGAACCAGATTTTGGTGCATCC  
GATGTTGTTGCTGCACCGGCACCTGTAGCCGGCATGTCCGATGAGCAGATCCAGGCGCTG  
ATTCGTGGTGTGCTGTAGTCCGTGCAAGCAAAGACTGGTTTCAGAACTTAATGCTTTGCGA  
GAAGAACTTGACACAAGCACTGGCTTACAATCCGGTTCAGGATTCACAGGCAGCATTGGCA  
CAGGTGCACGCAGCTGATGCCCGCAGCTTTGATGCCGATCAAGTGGGTGATGCTGTACC  
AAACGTTATGTTAATGACGACTTGGGGCTGTATGTGATGAGGCAAACCTCAATAATGCT  
TTGACCAGGGCACCCTTCCAGGTGGCGATGCCGCAATTCAGGAGACTACACCGTGGTTA  
GGTGATCAGCTTCGTACATTGGTGGCTGTGTTTAAATGGTCAGCTGCTTGATCAGCATCAG  
CGTGACTACGAAGAAGTGCGCGCATGTACATTGCGCTTAATGATCGCTCTAATCTTGAG  
ATCGCTCGTGATCTTGGACTGGATAATAAGGATTCGAATTCACGAGGTTTACCGTGCC  
ATTGAGCGTGACCGCATGTTATGGCTGGTGATCAACAGCGTGTGGAGTCAGAGCGTCGT  
CAGCAATTGCAGCAGGAGTATGAGGCGAACCCTGAAGAATATGTCATGGCAAAGATCGCG  
GAGCAGCGCGTGGAGTATGATCGCCGTATATGCCCTCGCCATACCGCATCACTAGAAGCG  
GTAGGTGCGAGAGCTGACGAGCCTGCGGGATCGCACCATTGAGGATTACACCGCACGCATG  
AACACGCTGCGTCGTGCACGTGCTGGTGAACGGGCTAACGCTGCAGAATCTCGCATTATT  
GACGAATTGCGCCCCGATTGTGGAGCGCCAGGCAGAACTGCAACGAGCAGCTTTCGATGGT  
TTCATTGTTGATCTTGACAAGTTTATTGCTGATCACCGCGAAGATGACCTGCGTTTGGCA  
TCGGTGAATGAGCAGAAGCTTGCTGCAGATAATCGTGTGGCACAGTTGACCAAGGAAGCC  
GAAGAGCGCATCGAGGGTATCCGCGTCGAGACCGATAAGATGATCGCCTCCAGCGCAAG  
GCACTTGAGCGTCAGGAAGCGGAATTCGCAGCAGAGCTTAAGCGTCGCGACACTATTGTC  
GCTGCATCGGAGGAACGTGCTGAGCGGGAAATTACCACAGCACGTCTTGATGCTGAGGCG  
GCGCTCAAGCGCATGGAAGAGCAAATTCGTGTAAATAATGAGGCGCATGAGGCGGAGATT  
GTTATTGAGCGCATCGAGCCACCAAGCAGAGGCGAACTCCATGACGTTTGTGAGTCA  
GTCAAGCAGCAGGATCGCAGCAACAACATCATTTTGATTGCCGTCCTCATTGTGGGGCTG  
ATTGCCGGCATGGTCGCTGGCGCAGCCTTCTTC

>RXA02753-downstream  
TAAAAGATCGTTGCGCGGGCTGT



>RXA02756-upstream

CGTGACGGTTGTTGCAATTCCATAACTAAACGAGCTTTGATTAAACAAGTCCTTGTATTGT  
GTAAATCGCTTATTGCACACAATTGAAAAAGGACATTGTT

>RXA02756

ATGACAAGCCCTTATGGATCCCAATACCCAGGCGACGACAACAATAATTGGAACTCCCAG  
TTCGGCAACCCTTCCGGCGAGCAGAACTACGGTCAGCCCTACGGTGCGCCATATGGACAG  
CCTTACGGGCAGCCATTTGATCAAGGATTCAACGCCTACAGTTCTCCCATCCCACCTGAG  
GTCCCACAGCCTTCCATGCAGGAGGCTCAGTGGCGCTCCTTTGACCTTGGAACTGTTTTT  
GGTCAGGCATGGAAGGGCTTTACCGCAACGTGGCAGGCATGGGTGCTGTCTGCACTGATC  
TACTTCGCGGTGTTGCTTGTGCTGATGTTTGCCTGGATCCTCCCGATGGTTAGTGTGCTC  
GCAGCGACCTCATCTGGTTCTGATTCGCGAGCTATTGCAGCGACGGGTGGCACCAGCTTC  
TTCGGGTTTCATGCTGATGATCGTCCCTGGCATTTCATCAGTTTTGTGTACTCCCTTAACTGC  
TACCGCAACGCGGCTCGAGTTGTGCGCGGTGAGCAGATCACCATTTCAGAGTTTCTTCAAG  
ATGAAGGGTCTTGGAAGGCGCTCGGTATTTACATCTTGATCAATATCGTCATCTTCATC  
GGAATGATCTTGCTGCTCATTCCTGGAATTATCGCTGCCGTGGTGCTGATCTTGCTGTT  
CCTGTGGCATTCCAGCTGCGCGACGCCTCGATCGGTGATGCGTTTTCCGCAAGCTGGAAG  
GCAGTGTCCAAAACGTTGGTCAGGTCATTCCTTTAGAACTGGCTATCTTCGCGTTGAGC  
TTCTTGGGCAGCGCAGTGATCATCGGTATGTTGGTGACCACTCCGCTTACATTTCCTGCTG  
TATGCCTACGCATTCCAGACCGCCAGCGGTGGTCCCATCATGCAGCGTCAG

>RXA02756-downstream

TAGCAGTTAGTTTTACTTAGTCA

>RXA02757-upstream

TTCCGATCCTTCGACCGTTCAGGCAATGCAGATCGCGTTGCACATTCCGAAACAGAATCC  
CCCCGGCGGACAGATGTGTTGGAAGCGGCGGCGAGGAGT

>RXA02757

GTGGTCAAGCTTTGCCTCGACGAACGAGTATCCACCGATCCTGATTTTTCGGGCGGCCTTG  
GAACGTTGGTACGGACACTTGATTCCGGAAGGTGTCACGTGCGGCTCGTAATGCGGCGTG  
GATCGGGTGCAAGATTTACCCGGCGTGACTGTGGAAGATGATGCTGCAAAGGTTCCGGCA  
TTTTTGGCCAGCGCAGTGGTGGATGTGCCTGCAGATATCAAAAAGCTGCAGATTTCCGGT  
ACGGAATTGCCTCTCGATGAGCCGAATCCGATCAACGATGAATACCCCGTTATCTACATT  
GATGAATCGTTGAAGATGACGCTGGGAAAGGCCGCTGCGCAGGTAGGACACGCATCCATG  
TTGCTTCCCGCGCACCAACCGTTTGAAGTGGGTGGAGCAGTGGGAAGCAGCGGATTTTGGC  
CTGCACGTACGGGAGATTCCCTCGGAGGAGTTCCCTGCGCCTTATCGAGTCTCCTGGTGCT  
GTTCCAGTTCGCGATGGCGGCTTTACTGAGGTTGCCCCCAACACCGTGACGGTTGTTGCA  
ATTCCA

>RXA02757-downstream

TAACTAAACGAGCTTTGATTAAAC

>RXA02765-upstream

TCTGAACTTTTCCGCATCGACCCAGATGAGGTTTACCCCGACGACGACGCCACCTGCGAA  
TTCAACCCATGGCCGTATCCTCGCGGATTTTAGGAGATAA

>RXA02765

ATGTCTAATCAATTACCCGATCACGTCCGCGACGCCCTTCCAAGTAGGTGCGGGACCTGCC  
GAACAACCTCGGTCAAGCTTGGGACTTCGGATTCCGCGTCGGCAACACTGTGTTCCGCAAA  
GTGACGGCGCCGGAAGTGTGGGGCTGGTCGTCGAAAACCCGCGAAACCTGAAACCAGAA  
GGCGTGCGCGTCGTACGACCGATCCGCTCCACCGACGGCCGATTTGTGGTTGCGGGGTGG  
CGCGCATCGGTGTTCTCTACGGGAACGATCAGCAAGCAGTCGATGAGACGGTCGTTGCG  
GGTCTTCGTTTTGGCAGATTGATGAGTGGATACGCATGCACCGGAACCTGTGGACAATGTG  
TTTAACCGTGCTGATGTGCAGGCCCTGGGAAGAGCAGCCCGGTGCAATCGGTGAATTGTTG  
GAGCCGATTAATCGCGTGAACCAGGTTGGTCATGCGGATATGTTGGCGACAACGCTGTAT  
GCGGGAACCTCAGCCACCTGCAGTGACGGATTTGGTGCCAGTGCTGCGTCCGCATGGTTTC  
ACTGCGGCATTGGTGATCGTTGATGGGTTGCTGCTGGGTGCGGTTGATGAGGGAATTCTG  
CGGAGGTTTTTCGCATTTGCCGGAATTGAGCAGCTGGTTTTGAGGGCATTTTTGTTCCTG

CGAAACTTGCAGGAGTTCTCTGAGAACAACGATCCGAATGTTATTTTGAACCTAAACAGG  
GTGGAATCGACACTCGTGTCTGATGTTTCTGACAAGATT

>RXA02765-downstream  
TGAGGTATGTCGGAATACAAACC

>RXA02766-upstream  
ATTTCTCGCCGCGCCGACGGTGACGCCGGCCATGTTGAGTGCTAGTTCGCGCATGGGTA  
ACACCTTACTGGCGTAAGGCCAGGGCTTAGACTGGTACCC

>RXA02766  
ATGACAACCTCAGAAAATTTTTATGATTCTGTGGGCGGCGAGGAAACGTTTTCCCTCATC  
GTCCACCGTTTTATGAACAGGTCCCCAACGACGATATTTAGGCCCCGATGTATCCGCCG  
GATGATTTTGAGGGCGCCGAGCAGCGTCTAAAGATGTTCCCTCAGCCAGTACTGGGGCGGC  
CCGAAGGATTATCAGGAGCAGCGTGGACACCCTCGTCTGCGCATGCGTCACGTCAATTAC  
CCCATCGGCGTCACCGCAGCGGAGCGTTGGCTGCAGCTCATGTCCAATGCACTCGACGGC  
GTGGATTGACCGCGGAGCAGCGTGAAGCGATTTGGGAGCATATGGTGCGCGCGGCCGAT  
ATGCTGATCAATTCCAACCCCGATCCGCACGCT

>RXA02766-downstream  
TAACTTCTGCCAAAAAGTCGTTT

>RXA02770  
GGTATTAACCGCCAGGTGATTTACACTATCAATGAAGATGCCACCTACTCAGATGGTCAG  
CCTGTGGTGTGTGATGATTTTCTGCTCTCTGCGACAGCTGGGCAGATGCCGGAACGTTC  
CAGTCCCATGTGCCATTGACCTCGCAGATTGAGCGAGTGGACTGTGTATCTGGTTCTAAA  
GTAGCCACCGTGGTGTTCAAGGAAGACCTCGGTGAGCGTTGGCGTTATCTTTTTGAGCAG  
GGCGATTGTTGCCAGCCCATGCCGTTGCTTCCAAAGCAGGTATGACCTTGGAGGAGCTT  
AATCAGGCGTTGAAGGATAAGGATCCTGAAGCGTTGACTGAACCTGCTCGTGTGTGGAGC  
GAAGGTTTTCCAGCTGTCCAGTTTGATCCAGAGCTGCAGACGGCTTTTGGCCCGTACAAG  
GTGGATTCTGTGGGTGAATTCGGCGAAGTCAAGCTGGTACGCAATGAGTTTTACAGTGGC  
GACCAGGCGGTTGAAGCAGAAATCACGATGTGGCCTAAAGGCTCGGATCTCAGCGCCATT  
GCGGATAATGGAACCTTCAGATCGCACATGTTGTGGCGTGGGAGAGCGAGCCGTGGGTA  
AATCGCGATGACCCATTGAATCCTTATGACATTAAGGAAGAGGTCCGTTGTTTACTGAG  
CAGCTCACCTTGGCCAGTGCCGGTGTGTTTTACGCTGCGGAGGCCCCGGCAGGCGTTTGGC  
GCCTGCGTTGACCAGGAAGCGGTGGCTGCGGCGTCTCAAGCATCTCTGGAATCGATGTG  
CCTGCCGTAGGTGTGCACTCGGTGCGTCACCAAAATCCGGTCTGTCACCAAAATCGGTGAT  
CTGCCAGCACGACATGGCGGTGGATATTAATGCCGCATCAGCGTTGGCGGGTCAATCC  
ATCCGCATTGGCTACGACGGACCCGATGAGCGCAAGGCTGCAATGGTGGAGGCGATTCCG  
CAAAGTTGTGAGCCTGCCGGTATCACCGTTATCGATGCGTTCGAGGAGGCTGTTAGTCTT  
AATGATCTCAGTCGAACCGAAGTCAGTGAATGGGGCTATGAGCAGTACTTCAAGGGACA  
CTTGACGCTGTTCTGCGTACAGTGGATCCACATCGGGAGTATGAAAATGCCAATACCATT  
GGAACCTGATGCGGAGTCGACGAGGCGCACTGAAGAACAATTGTGGGCTGAAGTCCCATCA  
ATTCCACTAGCAGCGCAACCCCGAGTGTGTTGTGATAGATCGCACAGTCGGTAACGTTGTT  
GTTAATACAGACCTAGCCGGTATCGGATGGAACATGGACCGTTGGTCCAGAAGTGAGGAA

>RXA02770-downstream  
TAAGTAGTGAGCGAACAAGCTCT

>RXA02774  
CCCTGCCACCAACACAGAAGCTGCTCTATGCACAGATGCGTGAAATTGCAGCCGAACTT  
ACAGCCTGTGACGCTACTCGCGGACTCCATGCCGAAGTGGCTGCCGAATGGCTTAGTGAC  
GCCATAACCGGCGAACCCACCTCTATCGAGATTGACCCCCACCGCAACCTGTTCTACGCA  
CTTAATGTTGAGCACC CGGACTCCATGAACTCTTTGCCGGTTACGCTACACGCCTTGAT  
GAACTCGACCGCGACCGCAGCAGTGTGAGTCGCGTCAATATTTCTTGATTATGTCTGT  
GCTGACAACCCTTTTGGCTCAGACAAACCAGAGGGCATTATCGTGCTGCTCGCTGATCAC  
GTGCTGGCAGCAGATCCAGTGACAAACAAGCCGGCACTCAAATCAGAGGCATTCCCTACT  
GTCACAGACTATTGCCGCACTACTCTGCTAAACCAACAGACATTCTCATT

>RXA02774-downstream  
TAAGGATTTTAGTCACCATGACG

>RXA02775-upstream  
GCCCCCACCATCTTTGGCACTGAGATTGTGTTTCGATTAACTACCCTGCTGCACACACAC  
ATACAACACCTCTCACACACAAACAAGAAAGGGTCACCCC

>RXA02775  
ATGACCACCGTTCAAGTATCCACCCGCACTGTGCGCGAACACCGTTTTACTGTGCCAGTG  
GACTACGCTGTGCGCGCCACCATTTCAGAAATCTATGCTGCCTGTGCCATGGCCGAAAAG  
AAAGCCAACAACCTTGGGCTTAACACTACTAAGGACGATTGGGCACGAGTCACTGTCACT  
GATAATGCTGTGTGTTTATTGTGCGAGAATGTTATCGGGAATACT

>RXA02775-downstream  
TAGAATTGTGTGCTCCTTAACGG

>RXA02776-upstream  
GCAGCACCTAGCAATGCAGCCGAGGCAGCCCCCTTCAGGTTTTGAGCCAGGTACGGCTATT  
CAAGTTGTATAATCCTTCATTTCGATGATCAAACACCTTCG

>RXA02776  
GTGCTCTATCCTGTGAAGCAGGAACGGTGTCTCTCGTTGATGTAAAGAAAGCGGCTAGC  
CGTGCCCTTTGAACAGTGGGAAAAGCACAACGAGTCCGCTGGTGATGTCGGTGATGATCTT  
TCACTGCAGAGTATCGTAGATCTCATTGAGCGTGACACTTCCCCACCGACGATGAGCAA  
GAGCTCAATAATGTGGCTTTGCTTATCGGCGAACTCCTGGTGAGGGAGGCCGGTGGAGAG  
TGGACGTCGTACATCTCAAAGAAAAATGATGAAGATGAATCGCTGGAGATTTTCGGGGTT  
TTTGGCACCGGTGGCACTGAAGGATTATCTGTAGTGGGTAAAT

>RXA02776-downstream  
TGAGTTCGCATGGTTAGTGAAAA

>RXA02777-upstream  
GGTCGCACCACCAACTACTGTTTCTTCTGTAATTTGCACTGAAACTATCGCCTACACT  
GTCACGTGCTACCATCACAATCGGTTGCTAGTAGGCTACAA

>RXA02777  
ATGAACCGCCCCCTTCAAAGTCAAAATTTTTCAATAACCAGCGAATGGGCAAATGCCACG  
TTCAACGATATCGAAGACTCTTTGGAGGGGTCTTTTGACATCGAACCAGGCCAATACATT  
GGACGCGGAGAATACTTTCGTAGCTACTTCTGGAACGGGTTCAAAAAGTTTATCAAGGTG  
GTTTTGGGTGACGGTATCGATAGCGAACTAAATCGTCGCATCGAAGGTGAAATTCTTGCA  
AGTAGTCTCCATCTTCCATCCACAGACCTAATCTCTCCTGTCTGTAATTCAGTATGTGAAA  
GAGTCTTCTAATTTTCCCGGTGACTTCTACATCGTGTCCGACTTCAAAGACGACACAGAA  
ACTTTAGAGCTATCTAAGGCTTCTCTACCCCTCACTGACTTAGCCAAGATCGGAGCGTTT  
CTCTTTTCGTTTGGAACTCTGTAACAGTTCCTTCAAAATCCTGCAAGGCGAGCAATGGAT  
GTTTTGGATGGACTTTCTCTTCTTGCAAATAAAGGCAACATTGAAACAGGCGCACAAATTA  
ACAAAAGGAACTATACAAGCTCTTGAAATCATTAATCAAGAAGCGACCAACATCGAGAAT  
GCACTTGAAAAAGTAATAAAGTAGGATCACGGAAGTTTTTCTCGCATGGAGATCTTAAA  
TTTTCTCAGTTCTTAATTAATGGTGAAACCGGAAAGATTTTCTATGTGACTGGGAAGAA  
TGCGGTAGTGACATTTTCGCAAATGACCTATGTTTTCTCGCAGGTGATTTGTTCTATAGC  
ACAATTCGGGAACCTGGTGATACCAACATCAAAAACATTAAAGGCTCCTCGATCATTCAG  
GAAGCCTACGATAATGCAACGCTTGAGGCTGTATCAAAAGTAAATGCAATATTAACCTGGC  
TATTCCTCAGAGAGGGGTACTCTCTCACCTCGGACGAAAAACGAATCATTAGTATCAGA  
ATCGGATTTGGCTGGTCTATTTGCACTTACACTGTGAGCGCTAAATCTAATGAGTTACGC  
CCGCGCAATTAGCCTTAGCCTCCATCGGAATGCAAATTACTTTAGGTCAAGCACCCAAT  
CTGGTGTTTACAGATAGCAAGGTGGTT

>RXA02777-downstream

TAAGTGAGGAATTTGCACGAAAC

>RXA02778-upstream

CTCCGATTTCTGAGGTCAGTACGCGCTCCTGTCTAACTTCTACCACCCAGCCCAACCAAT  
CGTTTTTCAAGGGTTCACCGAAGCAACTGTTGAGCACCTC

>RXA02778

ATGCAGGTCATTGAGACGCTTGATCCCGATCAGCGCGCAGCGGTGCTCGCTGCAGCGATA  
CCGCGCGAGGCTAAGATCCTGGGGCGAAAAGTAACTCTTCGCCCTGGTTGGGGCAATATG  
CGCGTACACGTCGTGATTGACGTTATCTTTATCAAGTTTTTGCAACCGGATCTTCGCCAG  
GCGCTGCTAACAACAGGTGATGCCGTAATTGTCGAAGATGATACC

>RXA02778-downstream

TGAGGCGCCTTCTGGGGCGTCGA

>RXA02779-upstream

CTCAAAGGAGACTGCACATCATGTTTCCTACCAAAGATATGCTCGCACGTTTTCTTGCAA  
GTTTGAATTTGCCAATGCACAGTGCTCAGAACCAGAAGAA

>RXA02779

ATGGGCGAATACTTCCAGGTCGTTCAAAACATCGCCATGACACTGGGTGCTGGCGAAAGC  
GTTGATCTTGTGTCCGCGAATACATCAACGATGTGGAAGGCAACCCGACCATCTATCAC  
GGTATGCCGCTGCGTACTGAATACCGCGCATTCAATCGACCTTGATCACTGTGATCCGTCC  
GCTGGTGAGCCTGAGCCTCGCTTATTGGGGTTACTCCCTACTGGCACCCCTCCGTGATG  
GAGAAAGCTCTTCGCCTTTGCTTCAAGCGATGTTGGTG

>RXA02779-downstream

TGAATTCGGTCACATCAACGATG

>RXA02780-upstream

ATGGAGAAAGCTCTTCGCCCTTTGCTTCAAGCGATGTTGGTGCTGAATTCGGTCACATCAA  
CGATGATTACCGCACCTACCGTGCCACAAAGACAGCCTC

>RXA02780

ATGTCCAAGTTCCATACACACCGTGATGATGTCATTTACGTCATCACTGCACTACTACCC  
CAGCTTCGTGCACAAGAGCTGCAAGGTCAATGGTCTGTGGACATCATGAAAAACGGGGAG  
GATTTCTACCTCATTGACATGGCTCTCATGTGCGAGTCCGCACTGTCTGAACTACTCACT  
GTTACAGATGAGTACGCCACAGTCGAGCCGAGTGTCATCAATGACTTCGCCAACCAGCTG  
GTCATTGATTATGACGAGCACGATATGGGCTTTGATCGAGACTTTCAGCAGGTGTGTAT  
AACACCCGACAAGCAAGTGCTATCAAC

>RXA02780-downstream

TAAAAAATACACACATCCACACC

>RXA02781-upstream

CTCCGAGAGTTTCCGCATCCGCGGTTTCGATCCCGGACGTTCCCCGGGAGACGCGGTGGGA  
CCGGCTGTGGCGGCCCTTCTGGGCGATACCGGCTGCCAGC

>RXA02781

GTGGTCGCGGCCCTGGTTTTTCGGTTTCTCTGCTTCCACGTCGGGAACGTGGGTGTCCGAC  
GCCGCGCTCAAATTCGTTTTTGGGGTGGGCCTGATGCCGCCGCGAGGTGCTGGGCACC  
ATCGCCGCTCCACGATCTCAGTGACCGGTCTCATCTTCTCCATCACTCTCGTTGTTCTG  
CAGCTGGTGAGCAGCCAGTTTCAGCCCGCGAATGCTCAACGGCTTCTGCGCAACCGCATC  
GTGCAAGGCCACCTGGCGATGTTCTTGGGGACGTTCTGTGTTCTCCCTGACGGTCATCCGG  
TACGCTGTGGAGCGAGGACAGGACATCACCGGATTCGTCCCCCGTGCTTCAGTGTGGTT  
GCCTTCTGTGTGCTCGGGTGTCTGGGACTGTTCTTGGCGTTTCATCCGGCTCATCACC  
TTCTCGATGCGGGTGGCCAACGCCATCTCCGAGATCGGGGAGGAGACGATGGCTCTGGCC

GCACGTATCTATCCCGTGCAGAGCGACGACGACGAGGCCAGTCCAGGGGCCGGGCTGGTCA  
CCGCGGCCCGGTGACCCCGGGAAGAAATCCGGGTGGGCAACCATGGTTCGCTGGTGTGG  
ATCGACTACCGGAAGCTGGTGTCTTGGTTCGACGGAACACCAGGCGGTGATCACGGTTCGAC  
CGGCCGGTGGGGGACTTCCCTCGTCGAGGGCCAGCCGCTGCTGCGGGTCTGGTGGGACGGG  
GAACTCAGCGACCGGGACCGACGCGTTCTGCACTCGGCCATCGAGGTGCGGACCGAGCGG  
GAACCTCACCAGGATGTGGCGTTTCGGACTGCGTCAACTGGTTCGACATTGCCGATCGTGGC  
TTGTCCCCCGGCATCAATGATCCGGCCACGGCGGGCCAGTGTGTCCAGGAGATCCACCGG  
ATCTTCCGCTATTTGGTTCACCGTTCATCGAGCCAGCCCTACATCGCCGATGACGACGGT  
CGGGTCCGTGTGGTGCACCAGCCGCAACGTATCGCGGACATGCTCTATGAGGTGATCCGT  
GAGATCCATCTCTACGGGGCGGATTCTGCGATGATTCCGAGGCTGCTGCGCACCATGGTC  
GAGGACCTGGTGACGGCCGCTGCCGATCATTCCCTGCCTGCCGTCGAGCGTGCCCGCGGC  
ATCCTGGACGATGAGACGGACGAGGACCGCGACAGTGACACCGCGAACGTC

>RXA02781-downstream  
TGATCCGGGATCAGGTGGCGGTG

>RXA02782-upstream  
GTGGATCTGTTGCAAGCATGAACCACCATTTATCTGGAAAACCTCACCAATTTTTCGCTGT  
ACGACAGAACACCCAGTGCCCTGTGTGCTCAGAGCGAACT

>RXA02782  
GTGGCGCCGCGCTTAATGATCTTGAACCACTCACCCATAACTTGCCGAGCAAATTGCA  
GATCCTCAACCAAGTGGTGTGAGCGCCGCGGCCATTATCCCCACCATTAGCAGGGGTTC  
CATAACGCAATTAACATGGCAATGTTCTAAAAATCATGACCACCAATGGGTGCGCCACAGTA  
AAGGATCGTGTTCGCGGAACAGACTGCCCCACCTGCGCAAATACAGGAACCTTCACGCAA  
GAGGCTGAACTTATGAGGTTCATCCGTGCATTATTCCCAAACACTGATGTCCAGCAAGGT  
GCGCTCATTAATGAGCGTACCGGTAATCAAGGTGCATCGCCGTCAACCGATGTACTCATA  
CCGTCCAAAAATCTCGCTATCGAGTTCAACGGCCTGTAAGGCACTCTGAGCTTTTCATC  
AAAGATAAGCATTATCATGCGAACAATCAGCTCTCGCAGAACAAGCCGGTGTGCAGCTC  
ATTCATGTGTGGGAGGACGACTGGAATCTTCGCCGCGACATTGTGATCCGCGATGATCGCA  
CACAAGCTTTCATGCAACCCATAACCTCAGTGCTGTTTTCCTACCGAACTACTGACTCA  
CGTGTGGCAACCACCGCTTTCGCCGTACACTCACACTGTGCGGTGGTCTCTGGTTTCACGCG  
CTGCTGCATTCT

>RXA02782-downstream  
TGAACAGCAACCATATTCAGGGT

>RXA02783-upstream  
ACAAGCTTCATGCAACCCATAACCTCAGTGCTGTTTTGCCTACCGAACTACTGACTCAC  
GTGTGGCAACCACCGCTTTCGCCGTACACTCACACTGTGCG

>RXA02783  
GTGGTCTCTGGTTACGCGCTGCTGCATTCTTGAACAGCAACCATATTCAGGGTGCTGTC  
TCGGCCACTAAGCACTTTGCCCTGTGCGACAACAACGACGATATTCGAGCACTCCTGTGCG  
GTGCGCTCACCAAAAAACAATGCCCCGATGTATCGCAAAAAAGGCACATGGGAAATCCAG  
CGCTATGCGACACTCGGTAACGTCCCTGGCGGTTTTACTAGGCTGCTGAAGTTTGCCGAG  
CACACACTCAACGAACACAGCACAGTACTCAAGCAATGGATCTCATTTTCTGCTGCTGAT  
GTCTCTGACGGCAGCCTGTATCGAACTGCCGGTTTTACCGCCGAGCAACAGCTTGACCCG  
GATTATCGCTATGTGCGGTGGCGCAACAGGTTGGCGCCGAACACCCAAAGAAAGCTTCCAG  
CGCAAACGCTTTAGAGACGACCCAGCGTTGCTATGGAACGAATCTTGACAGAGCACGAA  
GCAGCGCTCAACAACGAGCTCTACAGAATCTACGATGCCGGGAAAACCCGGTGGGTAA  
AATGTTGCT

>RXA02783-downstream  
TGATTCTGCAGATTAGTTACTGA

>RXA02784-upstream  
AGCTGCAACTCAGGTAGAAGAAACAACAGTCGCCCCGAGTTGAACACGATACTTACGACAC

TATTGCTAACCAGCTACAAGATGCCGGTGTCTATGACGAT

>RXA02784

GTGGCCTTTGCCGAAGGCTACTACCAGGAAATGGCTGAGGTTGTATGTGAAGCACGCGAA  
GAGGGTATCACCCACGAGGACACCCCTGCATATGCTCAATGACATGATGGCAATGAAACGA  
TCTGGCGAAGTACTCAATACGCTCGCTGATGTTCTCTATGCAAAATGAATGCCCTGAATAT  
CGAATC

>RXA02784-downstream

TAAATTGTTGGTCACTCTGCATA

>RXA02786

ATCCTGCGCAACCTCGGCCAATCGCTGGGCAGCCTGCACGCCGCCACCGCAGACCGCGAA  
GAAGACTTCAACATTCTGCTCAACCGTATGCTGGCCAAATACCCAGCCACAGCTGAGATG  
CAGAAAAACCGGATAGGTTGCTGCCCCGAGCAATTGAGGTGGGTAAAAAGATACTTGTCTC  
GACGCCGGGGTCAACGTTCCAGAAAGTCGTCGAGGAGTTTGCCCGCGTAGCTCGGCGACGC  
CTGATTTCCGGACGCCACCGTGCCTTCACACCTTTTGACTTGTACCCGACAACATCATC  
GTGGCTGAACGCACCCACTTCCTGGACTACGAAGTTGCCGGTTTCAGGGATGCCACCTTT  
GATGTTGCTTGTGTGATCGCAGGTTTCCCGCAATTTCGTGTTTCAGCCGCCCATCTCTGAT  
GATGAGGTAGACGAACCTCATTTGAATCCTGGGTCCAAGAAGTCCGTGGAATCTGGCCCAAT  
GTGAACAATGAAGAGCGCCTCCAAGCACGTATCGTGACCGCTCTCATCGGCTGGGCACTA  
TCGAGTGTTCCTTCATGAAGCTCGGCTCCATCAGCGGCATGCTTAACCTGCTGCACGTC  
ACCGAAGATGGAAACACCACTTTGGATGTCTCCAACCTTGATGAACGTGTGATTCCACGA  
TCTGCCGAAGATGACGAGCTGGTCCAGCAAGACCTCCACGACACGTTCTCCGCGCTTCAG  
CGATTTGCAGCGCGCGGGCTGGATTCCAGGTTCCCTGAGGTGGCACGATTTCGACAGACGAC  
GTGGTGCGTTTGTTCCTCAAAAATGAC

>RXA02786-downstream

TAGCTGAAGAGCACCGTTGCTT

>RXA02789-upstream

TTCTTCCGTACGGCTATGCTTAAAAGCTAAATTTGTCTTTGTGCCTTGCAACACATTAAT  
TTCTTAACACTAAACAATGGAAAGGTAAGCGGGTTTTTCT

>RXA02789

ATGAAGGTTTCCGCCGATACACCCGGTCACGATGATCCAGGCCAGGCCGGCGCCTTGGC  
TTAGATGTCCGCACCGTGCAGCATCGGAGTGGCAGCCTCTGACCGCGATGCCAAGCTTGGC  
ATGCCTGTGGAAACCGTTCCGCGGGAACCTGGATTCAAAGGGCCAGACCTGGCCGATATT  
GATCGGTTGGTTCGCCATCGTTGAGGAATACAACGCCGTGGAAGTCATTGTTGGTCTACCC  
ACAGATCTGCAGGGAATGGCTCCGCCAGTGTGAAGCATGCAAAGGAAATTGCTTTCCGC  
GTCCGTCCGCGCCTCACCAATGCTGGAAAGAACATTCCGGTACGGCTTGGCGACGAACGC  
CTCACCACCGTCTGTGGCCACCCAAGCCTTGCGGGCCTCAGGAGTCAGCGAAAAAGCGGGA  
CGTAAAGTTATTGATCAAGCTGCCGCAGTAGAAATCCTTCAAACCTGGTTGGATGCTCGC  
ACCCGAGCCCTTGAACCACAATCCACAGACACCCAAGATTTTCGACGAGAAGGGAATTTCC  
CAGGA

>RXA02789-downstream

TGAACCAAATCCGAAACCGCCGG

>RXA02793-upstream

TGCATGCTCCTCTAGTGATGTGGTGGAAAGTCAAGGGATAACCGTTGAAAACGTGGGCTC  
GGTGGTGAATTTTGATAGTCCACCATCACACATCGCCTTG

>RXA02793

ATGAAAAGCGCCGCCGTACCCACGCTTGATGCTTTAGGTGTTTTGGATCGCGTGGTGACC  
AAAGCTGGTGCCTTCCAGCTGGGTATTACGACGCCGATTTATCGGAAAGAGTCACGGAC  
ATCCCAACGCTGTCCAACAAGATCGACGCCAGCGGACACGTGTTGATCTCGAAAGAAGTC  
GTTGTTGCCGCCAACCCAGACATTGTTTTCGGCGAAACTGACACCATCAACCGCGCATCC

ATGGCATCCTCGAACATCCCGGTCTGAGGGAACCAGCATTCGTGGCAGCATCGACGGC  
GACGTGAGTTTGTGATGATGCTGGTACAAATCTCCACCCTATGGCACCATTTTGTGATCGC  
TCGACAGAAGCAGACGCATACATTGCAACGTTGAAGGAACGTGTTTCTGAAGTATCCTCG  
CGGTTACTGACTCCGGAAAACTGTGGCGGTGCTCTACCCACCATCGGCGGCGGAGTC  
ACCTACGCATACGGCCGCGGATCCATGGCCAACCCACTTGTGGCGAAGCAGGCCTGACC  
AACGTTTTTCGACAGCAATCCGAACGCGTCTTTGAGGTCACGGCAGAAGAAGTATCTCC  
GAAACCCCGACTCATCATCGTTTACACAGCGACGGTTCCCTTCAGACATCGTCGCAGA  
GGTGGGCAATCTCCAAGGGTCCAGCGCACTCACTGCTCTGAG

>RXA02793-downstream  
TGAGAACAAAGTGCTGCCCATAC

>RXA02796-upstream  
GATTATTTCATGGAACATCCTTAGCGGAGTTATGCAAACGTTTTTCATAAGGGGTTATTCCA  
TTCTACGTCGATCTTTGTAGAAGGTGGTTATTATGGCTTC

>RXA02796  
ATGAGACTGTTTCGCGTCTATCACTCCGCCGATTGAAGTCACCGAGCATCTGATCAACGCG  
CTTCGTCCCTACAAGGATGATCTGCGGTGGTCTGATCCAGACAATTGGCACATCACGTTG  
GCGTCTATGGAGAATTACCTGATGGGGCAGTCGAAGATCTCATTTGAGCATCTGACAAGT  
GCAGCCCGAATCAATGAAGAATTACCATCAGAATCAAAGGCGCAGGCTCATTTAATCGG  
AAGAATTTGTGGATGGGTGTTGGTGGTGACACCAAAGATCTGCGGCGACTGATGGCTGAT  
TGTCTGATTGATCCTGAGGAACGCCGACGCCAGCGTGACACCTGACCGTGGCGAAACCA  
ACGACGCGACAGCGCAGCCGCGATTGGGATCCTGTATCCCGCATCTGGTCCACGCTCTC  
TCTATATACGAAGGCCCGAATGGCCAGTCGATGAGATTGAAGTGGTGTCTTCTGAACCT  
GGAAAAGGCAGAAGCGGTGGGCCACTGTATACAACCGTGGCCACCATTGCGTTGTCATCT  
GCGCTGGTT

>RXA02796-downstream  
TAAAGGCTCAACCGCGGAACGGC

>RXA02798-upstream  
GCATCAAAATCATGTGCATTTCATCATTTGCTGATCATCATAGACCTGTTGGCAAATGAATT  
CACCAATTCTTTAAAGCTCTCACCTCTTTAGGGAAGTGA

>RXA02798  
ATGCGGTCTGTACTCGACTACTGGATCATGACTCTTGACCTTCCACCAATGCGGTTTCG  
CAGCAACAAGAAGGAACCTTCCCAAGCGCCGCGACTTCTTCATCGACTTCACTTCTTT  
GCCGGCATTTATCTGCGCACCGTTGATTTTCATCGCTGCGCTCACCGGACTGGTGTATGCG  
TTCTCCCCCACCATTGAAAGCATCTCTAATCAGGAAATGCTCACGGTCTCCAAGTCGGCT  
AGCGACACAGCTCTTCCGGTGGTGAACAAGTGAGCATCGCCCAAGAACTCCACCCCGAT  
TTAGATCTCTCAGGTGTCCGGCTTGGCGATGATTCTCCACCACCCGCGTCTCTCGCC  
GACGAGACGCTTGCTGAATCCACAGTCCGCGCCGTGTTTGTGATCCCTACACCGGCGAG  
ATCACCGGTGATACCAACCAATACGGAAGCTCAGCTGCACTGCCGTTTCGGCAATGGGTC  
TCGCAAGGTACCCGATGTTGTGGCTTGGTGAACCTGGACGATTTATTCCGAACCTTGGC  
GCAAGTTGGCTCGGAGTTTTCAGCGTAGGCGGTTTCGATTATTGTGGTTGCGCAACAAA  
AAGCCCGGCCGCTTGAGAAAGATGGTGCGAACTGGTGGCCGTGGTCGAGTGAAAACGTAT  
CGCCGACATGCAGCATTTGGGCACCGTAGCGGGCTTGGGTTTTGTGTTCTCACCTTTACT  
GGCCTGACCTGGTCAACTTATGCGGGATCCAACATCACGGATTACGCACCAACTCAAT  
TGGACGCAGCCTTCCGTTAACGCTTCTCTAACAGCTGCCCCACAAGTGGACATGCATGAT  
GAACACGCAGGTCATCATGTCATATGGAGTCGGCAACCTCAGGCTCAGGTTCTATAGAT  
CTGGTAGCGGCCACGGCTATCTCCGAATTACGCACTCCCTCACCATTACTCCCCAGCA  
CAAGATGGCCTCGCGTGGACTGCCACAGAAAACCGCGACGCCTACCGATTACCACTGAC  
ACCATCGCTGTTGATGGCGACACCGGAATGCTGACCAACCGTTTGAATTCACCTGATTGG  
CCATTAGCTGCTCAAGCGAGTGCATGGCTCATCCAGCTTACATGGGCACCTGTTTGGC  
CTTCCCAACCAAGGTTGACTTGGGCTGTTGGCTGCCCTCAATAATCGTGATGATCGGCCTT  
GGGTATTGGATGCTGTGGCAGCATCGGCCACGGGAAGGTTGGCCTAGCGCTCCCAAGCGT  
GCAGGATTTGAAAACCCACCTGGGGAACATTCGCGTTGGGTGTTGTGGTGATCGCGTAT  
GGGCTTCTCGCGCCACTTTTTGCAGTTTCACTGCTCGTGTATTATTGGATTAAGCCTTGA

GTGCGGTTTATTCTCGTATGTCCGGGCGCGCGGACACGTCCAAC

>RXA02798-downstream  
TAAGAACACCAAACACACCGCC

>RXA02799-upstream  
TCGCGCGCAAGTGTTTCTAGTAATATGGACTCCCAGTAACGGGTTTTCATGACGCGTTAAAT  
TTTTTAGTTGATCACAGATACACCAATCAGGAGTAGCGCA

>RXA02799  
GTGGCAGCGAACATTGAAGACATCCAGCGCGATATTGAGCGCACCCGCCGTCAGTTGGCT  
TCCACCCTCGACGAGCTGGCAGACCGCAGCAAGCCTTCCAACCTGGTCGATGACGCCAAG  
AACCAGGCAACCGCGAAGCTGCAGGAATCAAACGTACAGAAGGTGCTCCTGGGCGTCGCT  
GCTGTCGTCGTCGGTGTGTTGTATTACGCGTTGTGCGTGGCCGTAAGAAGGCAAACGAT  
CTGAAGGAAATCCAGCGCCTGCTCTCCGAGCGT

>RXA02799-downstream  
TAAATTGCTTTTCGACGGGGCGT

>RXA02812  
GCTTCAGGCACCGACGCCCTCAACAATCACCCCTTGACCAGGTAGCTCTTCCCGTTGCCACT  
AACTCCGGAGCATCCCGACGCCGTAGCGCTGGCGCTGGCTGAAACCCAGAAAGCTGCCGCT  
GCTGCGCTCAACCGTGACGCCGATGTACCGCAACTGGAGCTGCCGACTCCCTGCGTTT  
GCCACCGTTGAAGGAGCAGAACTTCCAGAGGGCTACACCTTTGAAGCAGTAGACAGCGCA  
GAAGTACCTGTGTGGGCTGTGGCCATCAACGCTGGAAACGGTATCTCTGAAGACCAAGCC  
CGCGCCGCTCTGATTTTCTAGTAGCTTTCAGCTTCGACACCGGCAACGCCGATAACTCCGCG  
CTTGAAAGTGTTCTCACCCAAGCTTCAAGCGAATCCGCGGCAGAACTACTGAGGCGCAA  
CCAAGCGAGACCCCGGTTCGAGCCCGCCGCTGCTTCCCCATCCGATACCATCATCAACCTG  
GATACCTCATCCAACATGGATCGAGTTGTTGACGGCAGCCAGGAAACCTACCACACGGTT  
ACTTCCCGGACTCTGGCCAACCTCGCC

>RXA02815  
TGGCTGCGCAGTACCAAAGAGTTTGAAGACCAGCCCGTGATTCCGGCATTTCGAAGTAATC  
GCAACGGTTGCCCTCTGAATTTCGACGGCGACGACGGCAACTACTCCAACGAATTCCCGTG  
GAAGATCTAGTCGGATACGTTGACGCCATCACCGAAGCCGGCGGATACGCAGTCCTGGAT  
CTTCAACCCGGACGCGCCAACCTTCCTCGACCAAGCCAAAATGTATGAAGAACTCTCAAA  
CGACCAAACGTTGGATTGGCGCTAGATCCCGAGTGGAATTCGGACCCGATGAGCAACCC  
ATGACACGAGTGGGCTCTGCAGATGCCGCCGAAATCAACGAAGTATCCAGTGGCTCGCC  
GACCTGACCGCCGAGAACGATCTTCCACAAAAGGCATTTGTACTGCACCAATTCCAATTG  
GAAATGCTCACCAATCGGGATCAAATCAATACCGATCACCTGGAACCTGGCTGTGCTGTTG  
CACGCAGATGGACACGGAACGCAGGGGATAAGTACGCAACTTGGAACATGCTTCGCGAG  
GGACTGAGCCCG

>RXA02817-upstream  
AAAATTCCCACCCCAAACTCCCCACTTCGGTTAAGGAATCAGGATTCTCACAAAGTT  
CAGGCAGGCTCCCGCTACTTTTCAGCGCTAATCTTGGCTC

>RXA02817  
ATGATTTTAGGCGTACCCATTCAATATTTGCTCTATTTCATTGTGGAATTGGATTGTCGAT  
ACCGGTTTTGATGTAGCAATTATCCTGGTCTTGGCGTTTTTGTATTCCACGTATCGGCCGA  
CTGGCCATGCGTATTATCAAGCGCCGAGTGGAGTCTGCAGCCGATGCGGACACCACTAAG  
AACCAGCTCGCGTTTCGCCGCGTTGGCGTTTATATCGCGCAAATTGTGGCGTTTTTCATG  
CTTGCCGCTCTCCGCGATGCAGGCTTTTGGTTTCTCTCTCGCGGGCGCTGCGATTCCCGCA  
ACCATTCGCTCAGCTGCCATTGGCCTTGGTGCAGTCGATTGTTGCGGACTTCTTGGCC  
GGATTTTTCATCCTGACGGAAAAGCAATTCGGCGTGGGT

>RXA02818  
TCCTATTCCCGGAAGTTTTTGACCCAGGTGTGGATTTCGAGACAATGTCCGGCGATTATAAA



GGCCTTACCGATACGGCGTTCCGTAAGAAGCTGCAGCGCGATCTTGCCCTACCTGCGCAGA  
GTTGGCGTTCCGATTGAGCAGTTCACGGTCACCTCAGGCATAGCTGAAGGCCAGCAGGCG  
TACCGTCTGGCCCAGGATTCTTATAAGCTCCCCGAGGTGCAATTCACCCCAGATGAGGCC  
GCCGTGCTGGGCATGGCAGGGGAGATGGGCCATAATCAGGAACCTCGGCGCCTTCGCGCGT  
TCGGGGTGGACCAAATTGGCGGCCGGCGCGCAGCGTGATCTGTCCACGTCCACAGCC  
TTGACCAATGCGGGCGATTTAGGTTCTTGTCTGCAAAAACCTCGATGCGATCATCAAA  
GCCCCGCAATTGGGCAAGCAAATCAGCTTCGAATACCGGCGCGCCCCCAAAGACGCCCCC  
TCGCTTCGACACATGGATCCTTGGGGTCTGGTCCCTGAGCGCGACCGCATCTACCTGGTC  
GGATTCGACCTCGACCGCCAAGAAGCACGCACCTTCCGCATCACCCGCGTCCGCAACATC  
AAACTC

>RXA02823-upstream

TTATGTNTNTAAACAGCCAGTTGGGGGTTCATGGGGGAGCGCCCCGTGACTGGTTAATGCC  
CCGATCTGGGACGTACAGTAACAACGACACTGGAGGTGCC

>RXA02823

ATGACTGTTAGAAATCCCGACCGTGAGGCAATCCGTCACGGAAAAATTACGACGGAGGCG  
CTGCGTGAGCGTCCCGCATACCCGACCTGGGCAATGAAGCTGACCATGGCCATCACTGGC  
CTAATGTTTGGTGGCTTCGTTCTTGTTCACATGATCGGAAACCTGAAAATCTTCATGCCG  
GACTACGCAGCCGATTCTGCGCATCCGGGTGAAGCACAAGTAGATGTCTACGGCGAGTTC  
CTGCGTGAGATCGGATCCCCGATCCTCCCA

>RXA02824

TTCTACGAAACCGGCGAAGCCCTCGACCCGACCGGCGACAGCCTGACCATTTCTCTCCACC  
ACCACCGCGCCATCGACCAGCACGACCTCCACCTCTGCCTCAACTTCCGGTGGAACCGCC  
GACTGTTCTCCGGCGCATTTGGGTGTTGTCAACACCGGAACCAACGACGGCATGCTGGGC  
ACCATCCAGGAAGTAAACAACACCTTCGCGATTGGAACAACCTCATCGTCAACACCGAG  
CGCATGTTCTGCAACATTGATACCTCAAGGCGCGCTTCGACACGGATGATTCCAGCGAT  
TCAGCGACCTCTGCGACTTCTGGGACTACTGCGTCCACCGGCACCACCGCTGCAACTACC  
GCGGGAACACCGGTACCCTGGAAGTGGCAGCACCGCTTCCGGAACCTCCGGAACCTTCC  
GGAACCTCCGGCACCGCAGCAACTGTGCTGGCACCAACCCCAACTGACAATGGCGTTTGC  
ACCGCTTCCGGATCTTTGGGCGTGACCAAGCATCTGCGCAGTGGGGT

>RXA02825

AATGTTTCTGCAACGGAAGCTTCCGGTTCCGCTTCCGGTGTCCCTGTACAGTCGGGTTCG  
CAGGCGTTTCGCTGATTTCTACACCCAGGCACCCAGTTGGATCCGATCAGTTTCAGCGCA  
ACTTTGGGCGGCGACGCCAGCTGCGCCACCGGATCCACCTCGACCACAGGCGCTGCTGCC  
ACCGCGAACACTGACAACACCGAAGGTGTTGCCGGCGAGGAATCCACCACCCCGCTAAC  
CAAAACAGCCAGTTCCAAATCCGCCAGGCGCTGCAGATTCACCGGACTGGATACCACC  
ACCACAATGTTGCTCATCCTCGCGGCGTTGTTGTCGAGGTGGCTCCATGACTCGCTTC  
ACCGTCGGCAACCCGACTGGAAA

>RXA02825-downstream

TAAGGCTTCACATGAATAACGCT

>RXA02827-upstream

CGGTTTACTTTTATTTATCGAATGAATCATGTACATAGAATAATAAGCATTAAAGGGGGG  
GCGGGTAGGAAGAAGCAGCCGTGTCGCATATGCTTACTTT

>RXA02827

ATGTATGAGCAGCAGAAGATCCTTAACGAAGTCAGTGAAAAACGTCTTCAGGCAATCAAA  
GATTTTACAGAAGTGGGATCTGGATTCAAGATTGCGATGCGGGATCTTCCATTTCGCGGT  
GCAGGTAATCTCTTAGGTGCTCAGCAGCATGGATTATTTGATGCAGTCGGTTTCGATATG  
TATTCTCAAATGCTAAGCGAAGCTGTTTNTCGTAAACAAGGAAAGAATAGTCAAGTGGAG  
AAGNCCNCTGTTGAGATCGACCNCGGTGTCGATGCGTATCTACCTGAAACATACGTGGCA  
GATCANCGGCAGAAAATCGAGATCTATAACGAATTCGTGAACCTTGATTTCGAAGAAATG  
CTAGATGAAC TAGAAGATGATCTGCTCGACCGTTTGGAGAACANCCAGAAGAAGTAGCA

CAT

>RXA02838

ACCGTGCCGCTGGGCGACGGGCAGGGGCGGTATATCGCGAAGATCCCCCTCGACCGCGTTT  
GTGGGGGTGTCGGAGAACAAATTTGCCAATCTGGCTTTGGCCGAGGCGATCGGGATGGAG  
GTGCCCCGCGCGAGTTGGTGGGGCGTGCGCAGTTTGAAGGCGTGCCCCCGAGTTTGAG  
GCCATGACCGACGGGTTGGTTTTGCTGGTGCGGCGGTTTGATCGCGCGGGCGATGGCGTG  
CGCGTGCAATATGGAGGATTTTCGCACAGGTGTTTCGGCCTATACCCCGCGCGCAAGTATGAT  
GGGGCGGCCAGTCACGATATTGCGGCGGTGCTGGGCAGTGCGGTGTCGATCGCGGCGGGG  
TTGGAGTTCGTGCGGCGGCTGGCGCTCTCTGTTGTGATGGGCAACGGCGATATGCATTTG  
AAGAACTGGTCGCTGATCTATCACGGGCGGGGCGATGTGCCG

>RXA02840-upstream

AAGTGAAATCAATCGGCTTTTCCAGCAGCAGCACTGGTCGCGCCAGCGTGGGTGTTATGG  
TGAAGGCGAATACACCTTCAGCACCGCTGAGCCGGAAGAG

>RXA02840

ATGACGGTAATCAGTGGCGCGCTGAATGTGTTACTGCCTGACGCGACCGACTGGCAGGTG  
TATGAAGCCGTTTCGGTGTTTAATGTTCCCGGTCACAGTGAGTTTCATCTGCAAGTTGCC  
GAACCCACCTCTTATCTGTGCCGCTATCTG

>RXA02840-downstream

TAATTCCTCGCCTTCCCCTTGAA

>RXA02841-upstream

ACCACC

>RXA02841

ATGTTTCGCGAGCTTTTAAAAGCAATCTTCCGACCATTAAAAAGCTGGTTTATGAGGTCATT  
AATGGCGTCGATGCAGCGCTCAACGAAGTAGAGCGACACGTCTACTAATGAATCAGTCCGT  
GCTCGCGAACTCCCTAATGTCCAGTACAAAGCCACTGCGGGGCGCAACTTCGCCATATCC  
AAGCTGGTCCAAAATTTGCGTCGCATCAACAAGGCACAAAACAATCCACGTGGTGTCGCC  
ACTCATGCCACCGTGATTCTGCTTAAGGGAGACGGCAGC

>RXA02842

GATGCGGGATTGTGTACTTCCGGTGAAATCGATGATGCTGGCCATATTTTCGGCCTGGCA  
GGCGACGAATACCGAGGGGGGATTTCGACGGGTCGACACCCACGTGAAGAAAGTTCTTTCT  
GAAGTGTACAGACGCTCCGACGAGCTCGGGGAGGACTGGCTGGTAGTGATCACAAGTATG  
CATGGTCACCTTGATGAGGGCGGGCACGGCGGCACCCGATCGGGAGCGAGAATCCTGG  
ATCATCACGTGGAGCCCGCACCGGGAAGTCCACAGTGGCCTGAAGAAATTGCGCCGCNT  
GAGCTGGCAGAACTGATGCTTGTGGAGCGCCGAACCTTGAGG

>RXA02842-downstream

TGATTGTCACTAAA

>RXA02845

GAGGATCACACCTCAATGCTCACCCACTTTTCCGCGAGCTGTCGGCATGCATGACCGCGAT  
CCGGCTCGCTTCCCAGGCCAGGGCGACGGTTCCACCCGGATCTTTTTTGGCTGTACAAA  
AACGCCCTCAACCTGGTCATTAGCTCAGTGTTGTTTACCCGTGAGCAGATGGACAACATG  
CTCGATCAGATGGATGAACACTTCACGCGCGCGGGTATCCCGCGCATCGCGATTAATATT  
GAGCGCCGCGACGACGCCCTGATGAACGGCTCCCTCGAGCGTGCGCTAGAGCTGCAAGAG  
CTTATCGACGCCTCCCAGCACGACGATCCCTTCGACGACTGCCAACCTGCCAAATTGCA  
GGAAAAGCGGCACTCGCAATGGCAGCAGATGATTACGACGAAACCCAAAACCTCGTCTCC  
CAAATCATCAGCTACGGATCCATCGGCTGCGTCATGGAACCAGAGACCACCTCGCTGCG  
TTCATGCTGCGTGCTTAAGTCCGGCGATGCTGATTATGCCCCGTACCTGCAAGATGTC  
AGTGCGAAGGCAAAACCCAGAATTCCAGTCCCTTGATTCCGTTGGACGCCACCTAGAATTCT  
CTCGGCATCACTGGA

>RXA02846

GTGAATGGTCTGTCCATCATCAACGCGGTGAATAATGCGTGGTTCGGTGCACAAACGCACT  
GACTGGGCCAAATTCCGAATTCTTGCCGGCGCTTTGGTGCTTGGTTCTGTTCCCTGCTGTT  
GCAGTGGTGTATTTCCCTAACGGACCATGGCTGTTGATTTTCGTTGGTGCATGGTGCCTG  
CTCGCGTTGGGTGTTTCCCTGTTCCCAACAGAGAAATTCGCACTCAAGCAAGAAGCTAAA  
CTGCCTATGGTCATCTTCGGCATGATTGGTGGATTTCATGTCCACTGTTGCAGGCATCGCA  
GGGCCATCCCTGACTGTTTATGCGCGCCTGAGCCGCTGGGATTACCGAGACTTTGTGGCC  
ACCTTGCACCCAGTTCTACTCGTGGCCAAACACCGTATCGTTCCCTGCTCAAGGTTATCTTG  
ATCGGTGGACTCGATTTTCGGTGGCGCACCCGCATGGCTCTGGATCGGTGCCGTAGCGATG  
ATCTTTGTTCGGTGCTTGGTTGGGTGAAATCGTCAACGCTAAGGTGTCCACCCCAATGGCC  
AAGCGCATCGCTACGCTCCTGGCAGCAGCTGGT

>RXA02847-upstream

CCAGCCTCTTCTATGTCCAAAACTGGGAGCTCGCATCCCAAGGGTGCTGCCTACGGAGC  
AGCCTCTGCAGAAGTCAGTCCCTTCCAGCACTTGTGGTCC

>RXA02847

ATGGCTGTGCAAGGGCAGTTCTACCTCTTTTGCCATCTTGTTGAGCATGGCGATCATCCTG  
ATTCTGTCGATACCGCCCCGAATACTCCGCAGTGCAGCTAGCGACTCCTGTGCTGGCAGTG  
CTCACATCCGTATCATTTTTTCAGTGCAATCCTGTGGCATTTCATTGATCAATCAGTCAAC  
TACTATTCCACCTTACCAGGTTCTGGGAGCTCGGCCTTGGTGCATATTTGGTGCTGCAT  
GCGCCTCGAATTTTGATTTCTGCGAAGACTAAATCAATACTCGCAGCCGTCGGTTTGTTT  
ATGGTGCTATCCACTGGATTCTTCATGGATGGCGCAGAGACTTTCCCTGGATTCCCCGCG  
CTGTATCCCATCTTGGGTGCTTGCTTAGTCATCCTTGGCGACGGTAAAAATCTCGGTCTTT  
CTCTCCCGAAAATGGATGCTTTGGCTCGGCGATATCGCCTACCCGCTCTACTTGTGGCAC  
TGGCCTCTGCTGATCATTTTCACCGCTTTTGTTCAACCAAGAAGAGCCATCCATCTGGCTG  
GGTATCGCCGTGATTATGCTGTCCCTTGGCTTGGCGCAGCTGACTAACAATAAC

>RXA02848-upstream

AGCAAGGACCGCAACAACCTGGGGCAACCTGGATGAGCGTCTGTCTCGCCCGAACACGTTT  
AACCCAGCGCGTTTCAGAAATGTGAATTTCTTCTAGTTAC

>RXA02848

ATGCAGATCGTTCTGGCTTCGCGAGTCCCCGTCCCGCCGAAGAATCCTCAATTCGGCGGGC  
GTGAGCCCCCTCATCCACCCAGCTGATGTTGATGAGGACGCGCTCCTTCACTCCCTCAAC  
GGCTCTGCGCCGGAGGAGATCGTCCGCCAGCTTGCCTGGCTAAAGCACAGGTGGTTGCG  
CCGTCTATCCGGGCGACGTCGTCATCGGTGGCGATTCCATGCTGCTTATCGACGCCACC  
CTCCAAGGCAAGCCGCACACCCGCGAAGCCACCATCGAAAGATGGAAACAACAACGCGGC  
AACAAGGCCACACTGATCACCGGCCACGCCATCATCTTTGGCGATGAAGTGATCGTGGAG  
TCCTCCTCCACCAACATTCATTTCGCCGAGGCCAGCGAT

>RXA02849

TCCCCATACCCCGTCATGATCAGCACCTCTGCCGACGCCTCAAACGTGACCGTGCGCATC  
ATGGGTGTGGACACCACCTCCGTGGAATCCATCAACAACGGACGTTGGTCCACCACCCAG  
CCCAACACAGTTTCGAGTATCGGGTTTCAGATTGTGTGCCATCAACCGGTGCACCAGGATTT  
ACCACCTCAGACACCCGAATCATCAGCGATCTTTCTGGCAACGAAATCACCAGAGAACCC  
GTCACCACGGTTTACGATCCTTCACCAAACGTGGTCTGCTCC

>RXA02849-downstream

TAAACAAAATGCCCCACCAGAT

>RXA02856-upstream

GTAAATCATTGCCGCCAGAGAAGACCGCGCGGGCGAATTTGGGCTTGGAGGGAACCA  
AACGGCCACTTTTCCAGTCCAACAAAGTATGAGGATTAAT

>RXA02856

TTGCCCCACGCCAAAGAGCTCGCCACGAGCTGTGTTTGTGTTGCCACCCCTGCTGTGCCC  
GCGCTTCCCCTGATTCCTGGCGCGCAGTTTGATATCCACCAGGCATATCCGCCTCCCTT  
GCCACCTATGCCCGCAACCTCACCTTGCTGTCCACACCGCCGAGAATTTAGGAAACCGC  
GCGCTGACGGGCTCGCTGAAATCGAAGACACCGACGACCAACTCGCACACGCATTGGAG  
CGCCTGACA

>RXA02856-downstream  
TGATCGGTCTGATCAGCGCCCTT

>RXA02858  
CCAGAGTGGAAGAAATTCAACTCCGGCGACGCAGCCCGCGTTGTCCCAGACGCCAACGCA  
GAGCTCGACATCATCGGCGCACAGCACTTCTTGCCGATCGCCCCCTCCTACGCAAACGTC  
AAAACCCCTCTCCCGCATCTTCGCTGTCTATGCGCAGCCCTCGGCCACGTCACCGCTGCCTCC  
CCAGTCAACCGTGTCTTCTCCTCCCACTCCGTGCTCAGCAACGTTGACCGCGGATCCGAG  
CACTACTCCGGACCCAAACGGCTTGGGCGAATGGACCTCCGTGTTGGTCGCGCAGTAGCCACC  
AACTGGAACGGCGTTGTGACGCCCCCTCGACGAAGCCATCACCGTCAAGGAAGTAAACAGC  
CTCTTTTACCGAAGACGCCGCAACCCGCATTCAAGAAGCACAAGCAGCTGTTTCAGGCAGCT  
CGCGAGGCTGAAGAGCAAATCGCCAAGGAAGAAGCCGAAAAGGTCGACCCCTACGACAAC  
TCCCCATGGGCTGCAGCAGGCATCGACCCCATCAAGGTCTCCATCGACGGACGCACCATC  
TACACCCCTGCGCACCTACCTCGGCGGACAGCCAGTATTCTCTCGGAAAATTCGGCGAAATC  
TTCACCTTCAACAGCCAAAAATCCCTCCTGCGCTGGCTCGTCGAACACGATGACCACGAC  
CTCGCCCGCGCCTCCACCTGGAGCGACCTCATGCTCGGCATCAACGCCGGTGAAACCGAA  
CTCCTCGTCCACAGCGACAACGCTCTACTCCTTCAACGGCCTGGTCAAAGACATCAACACC  
TCCGTCGACGCCGTAGACACCCAAACAAATGGCCCCGCGCTACGAATCATGGCAGACACC  
GCCGACTGGGCGGACGACGACTCCATGAATTCTTCTTCTGCGCAACCCACGCATGCAG  
GACTACATCTCTTACATGCTCGGCGGCAGCGACACCTCCGGATATGTCCCTCACGCACCA  
TTCAACGACCACTCTGAGAGCTGGCGCGAGCTGGAGGAGATGCTGATCAAGCGATTACAG  
AAGTTC

>RXA02858-downstream  
TAGGTGCGCTATTGTTGGGGTTCGT

>RXA02862-upstream  
GCCGCGACTGCGGGTGCTTTTTCGCTGTTGCGTAAAAAATAGTTTTTATTAAGGGCATTC  
CCTGATTCCAGGTGGTGCCACATTGTTTATGGTGGAGAT

>RXA02862  
ATGAACACGAACTTGCCGAACCTATACACCGCATTTGACCTTGATCGAAGTGAATCCTCC  
GAAGCTTTAGGTGTTTCCCTTTCTGCCCGCGATCTTCGCTTAGAACAAATGGGAATTGCC  
CAGGACGATCCTCGACGTGCCCAAACCGTCCAAGCTTTCGCAGTGCTTGCAGACCCAGCA  
AAACGCGCCACCTACGATGCTCAATTAGAAGCTGGAGTTCCTTACCTGGGCGCAGATT  
CAGCATTTAGGAAACTTCGGCACCTTGCTTCCACCCCTACTGCGCAGCCGTTTTCGGCA  
CCTCAGCCGGAGCCGTGCGCGGAACCGCAACAGCAGTGGAATAGCGGACAAAATATGCG  
TATGGCAATCCGACCATGGATTACCAAACCTCAGCAGAGCTACAACCCGATGCAGGACCAA  
ACCCAAGCGTCGATGTATGCGCAACCTTTTCGCGAACACCCCTGCACCGATGTACAACAGC  
AATCAGGTTTTTTAACAGGCCCTACTGCGGGTACGCGTTTGTGGATGGCGATCCTCGACAGT  
ATTTTTTGCCGGCATCGCTGGTGGGAATTGTCTCCGGTATTTTCGGCTTTGGATCTGAATTC  
CTCACCAGTGTCTCATGATTTTGGTGCTGATCGTC

>RXA02867-upstream  
TTCAGCACAGATCACCCCTTGCCAGCTACCGACTTAGTTTCGTAACACGTATAGTGGGAG  
GCGTTTTGCCAGACGCCAAAGAAAGATAATTGGATTACCT

>RXA02867  
ATGAGCGCCACCAACCCCTGATGCCCTAGACGTGCAGCACGCTTATCCCATCAAGACGAAA  
AAGACTCCACTTGCGGTGATTTTCAACATCATTAGCGGTGGTTTGATTGGAATGGCGGAG  
TTGGTGCCAGGAATTTCCGGCGGAACGTGCTGCTTTGGTTCTTGGGAATTTATGAGCGCGCA  
CTGCACAACGGTGATCTCCTCATGATCTGATCAAGGTGTTGATCAAGGACCGCTCGAAG

GTTAAGGAAGCTGCGGCGAAAAATCGACTGGTGGTTCTCGGCGCTATCGGCGTTGGCATG  
GTCGTGATGGTCTTCTCGATGTCATCGATTTTGCATACAGTTGTTGAGGACTACCCAGAG  
ATCACTCGCGGTCTGTTCCTTGGAATGGTTGCCGTGTCTATCCTTGTTCGGTTGGGAATG  
ATGGATATGCGGGATGCCAAGAAGCGCTCGCAATCGTCATCCCCTATTTATAATCTGC  
GCCATGTGCGGATTCTTTGGAACATCCTTCACTAGTGCGCCTCGCACCGATCCTTCACTG  
ATCTTTGTCTTCATCTGTGCTGCGATCGCTGTGTGTGCTCTTGTCTTCTCTGGTGTTCAG  
GATCAC

>RXA02874

ACCGAACTCAACCGCGACACCCATCACCTGTGGGTGCTCTTAACCACCGACTCCGACGAC  
TTTCGACGCAGACTCCTTTACCACCGAAGTCATCCGGATCACCGGCTACTCCCGCCACGAA  
GTCAACAACGGCCTTAACGCCATGGCCGCGATGACCAACCTCCCACACCTGCGCGCCATC  
CAAGAAGCTACTACTTCTTGAGCATCCGCTACCTCGCCTCCATCATGATCGCCGTGGCC  
AAAGCAGACCCACCCCTGTGGGAAGAACTCGACCTGCGCATCACCGACGCCTTAACACCA  
GTCACCGCAGGGGAAGTCATGATCCAATCCTCCACCCTGTCCAAACNGCATCGCCNGCCT  
GGATCAAAGAAGCTCGACCCCGAACCACACCAGAGCCACACCGAAAGAGGACTATGTTT  
ACGTCCACACCACTGATGAGGCGACCTATGTCCGCATCAAAATCAGCGGCCCCAACCGCC

>RXA02874-downstream

TGATCCTCAATGACATCATCACC

>RXA02876-upstream

AACTGTTGGCATGGCGAAGTACAATGTTTCGTGCAACTGGTTCACGTGGAGCGCATCGTCCG  
CGAAATCACCGCGCGTAATAGCACCAGCTTAAAAACCTT

>RXA02876

ATGACATCAGACAAAGACACTGAACAATTGGAAGCGGCAGGCACTGAAATTTTAATGCCT  
CGCCGCCGTCCGGCACAGCAGCGCAGTTCGTGAACGATTCAATCGAATCCTCACCGCTGCG  
CGTTCAAGTGCTTGTTCGATCTAGGTTTGAATCGTTTACGTTTGATGAAGTCGCTAAGCGT  
GCAGAGGTACCGATCGGCACGCTGTACCAATTCTTTGCCAATAAGTATGTATTGATCTGC  
GAATTGGATCGTGTGGATACCGCAGAAGCTGTTCGCGGAGTTGAAGAAATTTCTCCGATCAG  
GTTCTCTGCGTTGCACTGGCCGGATATCCTTGATGAATTCATTGAGCACTTGGCTAGGCTC  
TGGCGCGATGATCCGTCTCGGCGGGCCGTGTGGCATGCCATCCAGTCCACGCCGGCAACT  
CGTGCGACAGCTGCGGCGACGAAAAAGAGATGCTGGAAATCATCGCGGAAGTTATGCGC  
CCGCTTGCCCGCGGTGCCGGCTACGAGGAGCGCATGTCACTGGCGGGATTGCTGGTGCAC  
ACGGTAAGTTCCCTGCTTAACTATGCCGTGCGTGATGTCAATAGTTCCGAAGAGGATTTT  
GACAGCATCGTGGAAGAAATCAAACGAATGCTGATTTCTTACCTCTTCTCCGTGGCTACT  
GGA

>RXA02876-downstream

TAGTCAACACGCACGTGCGCCACC

>RXA02881-upstream

CTGCCCCGATTTTCATGTTTCCGACGGCACCATCTGCAAAGAACGAGTGTGACCGGTAGCT  
TTATGGGCTGAACAATTCTAAGGAGAATTATCC

>RXA02881

GTGAAAAAGAGCTTATGTTGCCTTTGATTGTTGCAGCTTTGGGGTTAAGTGCCTGCAGC  
TCCGAACCTGCAGCAGCCCCACTCGAAGCAGAGCCATTACATAACCTGCTCATTGATGGT  
TCAGAGTCCGGCTTGGACAATGCCACTGAAGGAAACGACACCTCATTAAGTGGCCAACCC  
ATCAATCTTACAGTGGTCAACGGTGCCTTAGATATCGATGGCTCCTGCGGAAAAGCCCTC  
CAAGCTGTAGAGGACGTCAATCTGGACAGCGTAGCTAGCGCATCCAGGGCACTGGCATCC  
GGCGACAAACAAGTAGGCATCGCCATGTACTCAACCGCCGAAGACAACGACATCTACCA  
ATGGACCTCTACGCAGACATCGCGAATGCTTGCGAAGACCCCGTTCGTGATTTCTTCCGAC  
ACCACCTACACCTTCGGCAAACTCGATGATGCTCCCGACGGCGCCGTGGATTACCCCTC  
GACATTGAAGTCAACCTTGACAATCAAGGCTCCACCGTGATGATGATCCAAGAATTAGGA  
AACCACCACATCATCTGTCGAGGACTTGAAACCAACCCAGAAAGAAACCGCCACTGTCTTC  
GAAGCACAACGCACCAAACTCGAAGAAGGCTTGCAGCTTAAACAGAATTGGCAGCTTGGG  
TGGGTT

>RXA02881-downstream  
TAAATGCGCCCAACCTAAGAAAA

>RXA02884-upstream  
GCGATGCTCGAACGCGCAGAACGCTCCTGGGTAGACAAAGCCGCTGCATACGATTTGCGC  
TGGTCAGATCACTACCACCTGAACGTGATCTACTCCTAAA

>RXA02884  
ATGCTGCTGACAAATCTATGGGCCATCGGCATCACCGCCGAAGGCATGACAGGCGCGCTG  
GCCGAGGCCGACAAAAAATGGATCTCTTCGGAGTATCCGTCATCGCATGCGTTACCGCG  
ATCGGCGGCGGATCCATCCGCGACATGCTGCTGGGACATTACCCGCTGGTGTGGGTGGAA  
AAGCCACTGTATCTACTGCTGATCATTGGCGCAGCCATTTTGACAGTGTCCATTTCTTTC  
CTGATGGAGCACTCCGCTGTGTTGTTCTCTGCTGCGACGCCGTGGGTCTTTCTGCATTC  
GCTGTGATCGGCACACAAATCGCACTGGAAATGGGCTACGGATTCATCATCGCAGTAGTG  
GCATCAGTGCTCACAGGTGTATTTCGGCGGCGTCATGCGTGACCTTTTGTGTGACCGCATC  
CCACTGGTATTTCAAAAAGAGCTCTACGCATCAATCGCATTC

>RXA02885  
CGAGGTAAAGGATTCCACTTCACCTCGACTGAGTTTGCCGGTTCTTATTCTTTGGTCACC  
AATGGTCTTAACGATGTTGCTGGCGAATACGTCGGTGTCATGCGTGGCGATGTCAACAAC  
TCCGCTGTGCTTTTGTATGTGGATCGCTGGTCGGGACATGTCGTATGCGCAGATAGCTCG  
ATTAATACATACCACTACTTAAGCGTCCCCGTGTCGTTGACATGTGGGGGTGCAAGATT  
TCTCAGGCAGCGCTACTGAATAACCGTCGCGTAGTGACCTGGTGTCAATGGTGCCAAG  
CTCGATGAAATGGGACCAAAGCTAGAATCCATGACCGCTCATGTGGATATGACTAGCGGA  
GATCTCAACATGTTGAGCTGTTTGGTAAGCAAGAAGATGAGCTGTGCTGTATTCCACA  
CACATGGACAAAATCGTGTATATGACCGAGCAGGCATTGGGCGATAAGACCTCTGAGCTG  
GCGCTATTGCGCGGAAAGCTCAAAGAAATTATTACAGCCTTTTATGTGGATATGAAAATG  
TGGGCTCTTAATGCCGGTGAAAACCGTGACAAGCTGCGTCTTGTGGTGTGCCTCATGAG  
CAGATCCCGTGTCTCTGTCTTTCGTGTCTTATTGGATCAAGAATATGAGCGCCAGAAA  
TATGAGGGAACCAAAGACCCGTGAATGTTTCGTGCCATTTCTGTGCTGCGACTGACCTAT  
AAGGATTTGCTCGATACTCATGGCGATCTGTTTAAATCAGCACACGGCAGATGGCATTGAT  
TCTGTGAACTCTGCACGCCGCGTGATCTATGATTTTTCTGGAGTGCTGCGACGTGGCGCA  
GGTGTGCGGATGGCACAGCTGGTTAACGTGATTGGTTTTGCTGTGGAGACGCTTGGTCAA  
GGCGATGTGGTCATCATTCACGGTGTGATGGCATTGTCGATGTTGATGTTTCAGGATTAT  
TTGGCTAATCAGTTCGCATATATGGCTGAGCGTGGTGGGCGAGTGGCGTATCTCTACAGC  
TCGATGGACCGGATGCTTGGCACTGTTGGCTTCAATCAATTCCAACGTGCTGCGTACACC  
ATTTTGGGCCCCGATGAACGTTGACTCGGTGGTACTTATCAATCTCTGATTAATAGTCAG  
ATCCCGATGACTTGGCAGCGTTGGTGACAACGCAAGATTTCTGGTGCGAGCTATTTGCGC  
CGAAGCTTACCAATGTGGTGTTTGAACCAACCTTGCGTTGGGCGTTAATCCTTATATG  
GAGCAGCGTCGCAAGATTGAAGCACAGCGAGGTCAGCGACGATCCAAGCGAGACAAGCAC  
TACGGTGGTGGCACGACGATGGTGGGCACAGCGGATCTTGATGTTGTGCAATTCAGGCG  
AAGGCCGAGCACCGCGAAGAGCGCTTTGATGAGAAATCTGCGCGCAAGATGAAGGAGCTT  
GATGATGTAGAAGCGAAAGAACTAGCTTTGAAAACCTGGGCCGAAGAATCTTGATGATGCG  
CTTGACAGGTGGAGAAGAAGCGCCTGGCGAAGCGG

>RXA02885-downstream  
TAGTTGTTGGCTGTGGTGAATAA

>RXA02888-upstream  
AAGGTCAGCCGATTTTCGGTCAGTCAGCAACTAATTACGCTTATCTTCCGTGTACGATAG  
ACCGTAGTTAACATAAGGAATGGAATAGGAGAATTGCGGC

>RXA02888  
ATGTATTTCCGACAAAGCTGATTCTCTTGTTCCTTTCTGAGCAGGATTCAAGCTATGAATGC  
TGCGTAGGTTTTATTAGATGGCTCAGATGGACGTGATTATATTGAAAAGCTTCTGAAGGGT  
AGGAAGCTGAAGAACCATTCTTGAATGGGAAGATATTAACAAGGCTGATGTTGCTCGT  
GAAGAAATATATAAAGGGCAATTGGTGCATCTGGTGTGTTGTGACGGCTCTTTCCACGCCCT  
GGTGAAATTTCTTTTGTGTTTTCCAGGTCAATCTCTTATGAGTGCAACACTCGAAGAAGAC

TTTGCTGCGCTTGTGCTCGAAGAGGAGCGCACATCATTTAGACCTGAACTGTCTCACCTG  
TGGTCACTCCCCGTAGGGTGGGTAGCTCCGGGGCTTGAGGGTTTCGTGGAGCGTAATTCC  
GAGGCAGCT

>RXA02888-downstream  
TGAACCACCGCTTTCTGAGCCGG

>RXA02892-upstream  
ACCGAGGAAGTGAAGGAAAATGTAGGTGTCGGGGCTTAGAGAAACAAAAAGGCTGCTAC  
GCGGACAGCATTGTCACGTGCTGCTGCGGAGATCGCCTTG

>RXA02892  
ATGGAAGGCCCTGAGGCGTTACGGTTGCGGCCATTGCAGCTGCAGCCGGGGTCTCCCC  
AGGACTTTTCATAACTACTTCCCTTCTCGGGAAGACGCATTGGTGCAATTTGTGGTCATT  
CGCGTTTCAGGAAGTACCGGATCAGCTATACGAGTTTCTACAAGCGTGCCCCACGAGAT  
GCCATTGAACAATTGGTGATAAACCAATTGCGGGATGGCGATGACGCTATGGATTCTTTC  
AGCGCAATGTTTCGAATCGGTGAGATCCTTGAAAATCTTGACCCCATCAAGTGTGTTATC  
GATAAGGAGCGACTCATGCTCCGTTGCTTGAGTTCATGGTTGAACGTGACAAAGACCTT  
GACAAGTTTCGATGCGGCAACTCTGATCCATTTGCATGCAGCGGCAATTGCAACCTCGCTG  
CATACGTTTTACCAAGCTTCCGAGCCCCGGGACATAGAAGATGGAGTCGCATTGATCCGT  
CGGGCATGCGCCTGGATTAAAGAAA

>RXA02892-downstream  
TAAAAATTGTGGCGTGTGAACCT

>RXA02898-upstream  
CACCTGAATTGGCTGAGGGAGAGGCACCGACTGGCACCGAAGAGGTGCTTGCCTCGAAGG  
CGGGCGCTGAGGCGAATGGCCTGGAGTAGGGGACCAGATC

>RXA02898  
TTGGTCGTGGACTCCAGTGGCCGCTACAACGTCACCATCACAGGCCGTGACCACCACTGAG  
ACGGATTTCGGCCACCGCGCTGAACCTGCAGATGTCGGAAGCTGGCTACCTGGAGCGTTAC  
ACCGACGGGGCTACCGTCCCCAGCGTCATGCTGTCGGCTGCAGATGGCACCAACGCTCAA  
GAGCTTGTGACGCCCCGCTGCCGAACCTTGATCGAACTTTGATGTAGAAACCGGCGAA  
GCGCTAGTCGAGCAGGCTACAGGAATGATCACGCAGGCCTTGAGCTTCGTGCAGTACTTC  
CTCGTTGCCTTCGGTCTCATTTGCACTGCTGGTTGGTACCTTCATCATCGCGAATACCTTC  
TCCATGATTGTGGCTCAGCGCATGCGTGAGTTGCTCTCTCGGAGCCCTGGGTGCGGCG  
CCAGGACAGATCACTCGCTCTGTGGTGCTGGAAGCAACCATCGTTGGCCTCTTCGGCTCT  
GCTCTTGGTGTGCTGGGTGGTATGGGCCTCGTAGCGATCATTTTCAGCTGTCTCAATAAC  
CTGGGCATGCCGATGGGATCCAGCGTTGGCTTGACTCCTTCTGCAGTGGTTACCGCGCTC  
GTATTGGGCACCGTTGTCACCATTTGTGAGCGCGTGGGCTCCGGCTCGTCGTGCAGGTGAG  
GTTAAGCCTGTTGAAGCGATGCGCAACATGGAACCAACCACTATGCGTTCCATGATGGGG  
CGCACGATCACCGGTGGCATCGTTCTAGCACTCGGCATCATCTTTGCGATTGCCGGTGCG  
ATGATGACTGATTCTTCCACCGCTACTCGTTCCATCCTGGTGGGCATTGGTGCAGTGT  
GTCATCGTGGGTACGTTCTCTTCTCACCAGCGCTCTCCATGCCGTGTTGGTGGTGGCCTG  
GGCAAGGTTATCGGTGCACCGTTTGGCAGCGTTGGAAGCCTTGCTGCGACCAACTCCAAG  
CGAAACCCCTCGCCGTACCGCAACTACAGCGTTTCGCACTGACGTTGGGCATTGCCTTAGTG  
ACTGCAATTGGCATGCTTTCTGCAACCATGAAGGACGCAGTCTCCGACATGATGGCGGAG  
CAGTACACCGCAGATTACATCTGCAGGGACCAACCAACGGTTCCATCACCATGCCGAAG  
GAATCTGTCAATGATGTTTCGCGATGCTGAGGGCGTTGCCGATGTCGTGCTCGTTTCCATG  
AACTCTGCCCTCGGTGAACGGTCAGGCTTCATACAGCCAGCTGGGCCAGTCTGTAACCTTT  
GTCGCTGACGGCGACCTGAGCAAGGTCATCAGCACAGAAAGCATTGATGGCTCCCTCGAC  
TTGAGCAACCCAGGTGTTGTGACTAACAGACGTTTGTGCTGATGAAAACGGCTGGGCAGTA  
GGCGATACTCTGCAGCTTGAATCAATGGGGCAGACCATCGGCGATATCGAGTTGATCGGT  
ACCTTCACCGGAAACGACGCCATCGGAAATATGATCATCTCCGAAAGTTCTTGGCTGAT  
ACACGACGGCAGACACTGCTGTTCTCAGATGATGCTGGTGGTAGGCGAAGAAGGCTTT  
GATAAGGAACAACCTGCGCACCAACTTGGAAGACGCAGTCGCTGATTACATTGTCATCTCT  
GTGAAA

>RXA02899-upstream

GTGTCATTTTCTTGGCGGACGGTCGTATCGTGAACCAGTTGTTTGATCCCACCATCGAGG  
AAATCTTGGCCACGATGAACGGAATTGAGGATATTGCCTA

>RXA02899

ATGAATTCGGGTTCCACAATGCGCAGAATCAGTCTGCGCAATATTGGCGCGCACAAGGTC  
AGGCTGTTTTTGACAGTTCTGGCAGTGGTGCTCGGCACGTCCTTTGTTTCCGGCGCGATG  
ATGTTTACCAACGCGCTGTCCCTCCACTTTTGATGAGGCTATTGCCAGCAGCTTTGACGGC  
GTGGATGTGGTGGTTTACCAAAACGGTGCATCAGAGGTGCAGGGTGTTCCTGTTGAGACG  
GTTGAATCTTTGCGTGAGGATTCCCGCATCAACCATCTCAACATCAACGGTTCACAGACT  
GTCGTTCTGGCGGATGCTGATTCCAAGGCAATTCAAACGACTGGGGGATCGTCGTTAAGC  
ATTTATTACAGCGCGGACGACGCGGTTGCCAGGCACCTGAATTGGCTGAGGGAGAGGCA  
CCGACTGGCACCGAAGAGGTGCTTGCCCTCGAAGGCGGGCGCTGAGGCGAATGGCCTGGAG

>RXA02899-downstream

TAGGGGACCAGATCTTGGTCGTG

>RXA02905-upstream

CGAAACATCTAGGCAACCCGACTTTTATGTCCCTGCTTGAGTTGAAAACCTGCTGTCGATC  
AAAGGTGCCCCAATTGTTTCATGCCGTGAGTTTTGCATTA

>RXA02905

ATGGACTCCGTAAATGTCTCTGCTCATTGGCATAATCGTCGCGATTGCTGCTTTGCTGCCT  
CGCAAGGGTAAATATGGGCCAATCGCCACGCTACTGGTTGCCGGCGATTGGCTTGGCGTT  
TTCTCTCTCAGTATTTTGGTGATGCTCGTTTTTGGATGGACTAGAGGATTTAGTTCAGGGC  
TTTTTGGATTCAATCTGGTTTCGGAGTCATCCTTCTTGTAACTGGCATCGTTTCCTTCGTT  
GCGACACTGGTTTCTAAACCGACAGCAGCTAGAAAGCTTGATGGATTCTAGCGCCAGTA  
AAAACCTCCTAGTTGGAACCTGTTGGAGCCGGATTGATCCTTGGAATCGTTCAGTCAGCG  
ACATCTGTACCTTTTTATGCAGGGCTTGGATATTTGAGCGTTGGCAATTTAGTCCAGAA  
ATTAGGTATGGCGGACTTGTGGTCTATGCGACCTTGGCTCTGAGTCTGCCGATT

>RXN00022-upstream

AGGACTGCTCCGCAAACCTCTAACAACACCTGCTACTCCCCCTGCAGCGCCGGTCAACCC  
CACACCACCCACCCCTTAACAACCACAAGAAAGATTTATC

>RXN00022

ATGTCCGCTCCAACCATCTACCCCGGCACCAAAACATCTATTGATCCGATCACCATGGAT  
GACGCTCGCATCATCTTTTTTCGATATTGAGTCGCTCCACAATATTTTCACGGTAGCAACC  
TACGATTCTCTGTCCCAACCGTCGATGTCTTTTACCTGCTCGATCACACAACCAGCCCT  
CAGATCAGGGTGCTGCCGCACTCAATGGATTATTTTCGATCAAACGCGCAGCGATGCTGTT  
ATGGCTGCCCATCATTGAGCAAAACCCCTGCGTTTCGAGAAATTAAAGGCTCACCCATTACA  
ACCGCAGATGTAGCCCTCCACAATCTCGGTGACACCAACGCCAACCGACGCTGGCAGTCT  
AACGTGCTGCTTGCCCGGCTACTCGGGGGTATTAGTGTGCGCGGAGAGGTACCTGAGCAC  
CAGAGCCACAACCATCTCGCCAAGCAGTTTGGCCGAGGCAACCTTGGTCACCAGGGACTTC  
GATGTGAATTATGATCCAACAAGCGCTCACCCCTTTTACTGCTGGCTTCAACTCGATCAAC  
TATGACACCACCTTGCTCAGCCTGTACTTTCGCAATGTTGACCTCAAATATCGGAAGTACA  
CCGACGTATTTCCCGGTGATCACCGCACAGGAACCTTCGTGCGCATAACGACAAGCTCTTT  
AGCCCTGAGTTCATCAAAAACATGCCAAAGTATCTCTGGGATCGCGACAGCGGTGCTGGA  
CTCAGAGCTGCATCGGGTTTCCGCAACGCCATGCTCAAATCGGGTCGCCACATTGATATT  
CAACGCCCTCAATGAAAAACAGCTCTTTGTTGGACTCAAGCGCCTGCTTGGTCTCCTCGGT  
CACCAGATTCTCGAATCTGATCGTCTCTCTGGTGATGATGCCCATGTTGATACTAACGAG  
GATGTACTTGATCTCATTTGCCCTACAACGTCTCAGACGTGGTGGGCACCAGACTGCTCGCT  
GAGGACCCGGTGACTCCGGCTCTTTTCGATCTGCGGGCAGGTCTACTGAGCACCTACCCA  
GAGACTGTTTTTGATCATGATGGTACTTTCCGTCAGCCATCCACGCAGATGCGTAAAGAT  
CGCCTAACGATTAATACCTCATCAGCTCAGTTTCGAGCGCGTATTTTGGCGCCATATCGC  
CCACTCCGCGATGTCCCTGATGCGATTGGCGACATGCCGGTGGTGTCTTACTTGTACCCG  
GATGTCAGCTCGCCGAAGCAACAGGTCAAAAACAAGTCAACGTGCTTGATGAGTCAAAG  
AAGTCTCTCATGACAACATCACCGACCCGGAAGCAGTGCCTTTGATGAGGTCTTTT  
GCTTTTTCAGCTGATATTGAGGTCGCAACTTCAACAGTCAACAATGAGGCTATTGATACC  
CAGATTAACCAATTACGTGCTTATCTCAACCAGGTTGTGCGATTTCGATGCAGCTGGGTAT



GCGCTCTATGATGTACGTACACGTTTTGAGCAGATCTTCCCCAAGGATCGCAGCTACATC  
AACGATGCTACGGATATGACCCCTCGCGCAGTATCGAGCTTTGACGATCTGGTTGCACTC  
TGTGATGATATTCGCGGTGTACTTGATCGAGGTTTAGAGATCTCATCTCCGAATCATCAT  
GAGATGGTGGATGCTATGCGCAAGCAGCTGCACTATATTCAGGCATTTTACCGTGCCTGG  
GACCCATCAACGCCGCTTCAA

>RXN00022-downstream  
TGACGCTGACCCAGCGGTGACCC

>RXN00027-upstream  
TTAGGCAACGACTCCGAAACCTTCAAGAACGTGTGGCACTAACAATTGCGGACTATCCTT  
GGGAACTGTTTTAGATTTTATTTCAGGGTAGGGAGATTGTT

>RXN00027  
GTGGATGAACGAAGCCGGTTTGCGCGCAGCGTTTTCCCGGACGGTGAAGAACCAGATCCA  
CGTTTTCACTTTGGCCAATGAGCGCACGTTTTCTAGCATGGACGCGTACGTCTTTGGCGTTT  
CTTGCCGGTGGTATTGCTTTTGAGGCGTTCCAGATCAGTGGACTATCGGATACTGTCCGT  
ACAACAATCGCGGTTTTTATCATTGCGGTTGGCATGATCATTGCCGCTGGTGCTGCGGTG  
AGGTGGATGAATGTGGAGCGTGCAATGCGTAAACAGAAGCCACTTCCCGTACCTGCGATT  
ATTCCGTTTTCTGTCTATTGCGGCTTTGGTGGCCTCTGCGGCTGTCTTGGTTCTGATTATT  
GTTTCA

>RXN00027-downstream  
TAGCTATGCGCATTCATGAGGAT

>RXN00028-upstream  
AAAAGTCCTGGCCAGAAACTCTCTATACTGTGCAGCATGGCACCAACGATCACCGACAT  
CCATGTTCTGCTTCGTGCGGTGAGCGACAATCAGTGATC

>RXN00028  
ATGACCCCTCACTGCCTCTTCCTTGAGAGCCGGGAAAAATGTCTTTTAGTGCGGGTATATC  
GTGGGCGAGACGATGATCTTCCTCGTCGATCCCGATGAAGTCGAGATACGACGCAGCCCT  
AACAGCCTCCACGTCTGCGTAACGGTAGCGATATCTGCGCCGCAACGAGCATCATTGC  
TGGGTATTTGAGAATTTCAATAAACCCATTGACCCACCTGTTTCGATTGGGTCTCGGGAT  
ATCATCTGCCCCGAGCGCCTTGGCCTGGGTTCTTCAACAGCATTCATCTCCCGGTCTTAA  
TCCCACCACCTTCACGCGGATAAGATCACTGCGGGAGAGATTGCTGGACGCCCCACCTGG  
ATCCTCCGTGAGGAACCTACTTCAGGAGGGCAGGACCCAAGTCGATTGGTCACTCTTGAA  
ATCGACCAGGAACACGGTGTCTCCTTGAGTGGAGACTGGACAAGAAGACTCGAAGCC  
ACGGAGATTTCTTTTCTGACACTCTTCCTAATCCTTCCTGGGACGGAGCCTGGGAACCA  
TTCCATTATCCAGATTTCGACACACACACTGCCCCTGATGTTGCTGAAATACCCGGTTAC  
ATTCAGTCACTGCGGCCGAGTCTGAAGATCCTCGCAGACTACGAGTCTTCGTCAATGAG  
ATAGCACTCGAAGGTGATTTCCCTGACTACCGTCAAGGACAATCTGTGCGACTTACTTTG  
GGAATTAGCTCCTCCCTGTGCCACTCGAAGGAATGACAACCAGACGCGGGGCGGGTA  
CGCAACCTTGGGGAAGAAGCTAGTCCAGGCGATGACGGTATGCCCCAGTGGCCAATCCTG  
CTCACTGGTGTGATGGGTGGACGGCGCTGGCCTACACTCCCATCCCAAAACGTGGAGATGCA  
GAGATCCAGGGGTGGTTTTATTATTCCGCTACGGAATTGTTGATGTTCCACAGATCTA  
CGGGTAGAGCGTATTTTCGCTGGTATCGGCACAAGTGGCACCAACGAGCGTTTGTGGCAG  
GAGATAGACAATACTTCTTCGGCTTATCACTCGGAAGATTGGTGGATCCGCGATGTCGTT  
TTAGACGTCACGTTGGATGGAGCTGTTCCGCTCCGCTTAGACGTGACGTCTTCACTGCT  
GTCGATCCTATTGTGGCGGGTGACAAATTGTGGCTGTGTGACGTGCACTTTCCGGTAGCC  
CGCTGCTGGGAGACCACGACCGGCGGATACTTGGGGCAGACTTTAGTCCCAGCACCCTG  
CGAGATCGATCGTACGTCTTGAGCTGCACAGCGACCAACAATTAGGAGCCGTAGCGGCA  
AGTGGGAAGAGTGGTTGGATTCTCACACCTGGTCAAGCAGTAGCCACTAAAGCTCCTGAT  
TGGACTCCTCCCACCGGGCAACCGATCTGCCCTCAGGTCCCCTCCCCCTGGGAGATCGTC  
GCTGTCCGTGGCCAAGGTCTGTTTGAGCTGCAGGTGGAAACTAGTAGACGCACCGCCCTC  
GGTCGAGTTAATGCGACCGGTGGCGTCGACATCGGTGAACTCCCGCCCAACGGCTATACC  
ATCAGTTCTGTGGTTTCAGATCGGTGATGAATACATCGTGGGCAGGTGGGTAGAGGAATAC  
CGGCTCAACTCCAAACTGGAGGTCAATTTCTACCAAAGAGCTAGATATCTCCGCATCCGGA  
TGGAAAGCAAGGGGACGGTTGCTTATCTGTGCGGAAGACACTACATATGTTTCTTCGAC  
CAGGTCAGCGGGGCGAGCTTCCCAGCCTGGGTATCGCCGAGGGACACCAGGGCGAGGTT  
ATGTCAGCAACTTCTTCAGAGAGCATCGTGCTTATCTACCGGCGCAACCCGAACAATTCA

ATGTCGATTGTCCCGACTTCCGTTGCCACCTATGACAATGGCACCTGGACGACTATGCCG  
CTACAGGAAGCTCCAGCGGAAGTGTCC

>RXN00028-downstream  
TAAACTGCTCATAGACTGCTGAG

>RXN00033-upstream  
ACACGGATTTAACGTGACGGTTTCTCAGTGTTTTAGCTTCTGGCTTTTGGCTTCTGATG  
CTTTAGCGCTGGACTCAACATTTAAACAAAGGTGAACAC

>RXN00033  
ATGTCAGTACAGCAAAGCGGGTTGCTCGAACGTCTCGGCATTCCCCGACCCTTGATTTTC  
GGATTTATCGGCCCTACCATCTTCATGATCGGTGACGGTGTGCGAAACCAACATTTTGAA  
CCTTTCTCAGTTCCGAACATGGTTTCAGCGTTTCCCTCGCGGGAACCCGTGGTGACTGTT  
TACGGTGTGCGGTGGCGATCGCAGCATTCTTCGCGGCGGCACCTTCGGACCTGTGGGGT  
CCACGAAAAGTGATGATCCTCGGTGCTTCAATCTGGATCGTCTTTGAGCTGATCTTCCTC  
ACCGTGGCACTGACCACCGACCATACTTGGTTGATCTTCCTTGCTTATGGTCTCCGCGGC  
TTTGGTTATCCATTCTTCGCCTACGGATTCTTGGTGTGGATCACCAGCAACTGCCTCACCT  
AAGCAATTGGGTACCGGTGTGGGTGTTTCTACGTTGCCTTCTCTGCAGGTCTTCCTACC  
TTGGGTGCGCTGGTTGCCACCATTTCCATGCAGTACGTGAACCTTGACCTTCATGAAACG  
TTGTGGGTTTCCCTCGTGCTGGTGGTTCATCGGATCGCTCATCGCACTGCTGGGAGTGAAG  
GAACGTGCGCGACGCCACCCACTGGTTGCCAACCCCCGACGATGTGAAGCAAACACTTGGC  
CAGGGCTTCAAACCTTCGCGCAATGATCGACGTGCACGTTTGTACCTACATCCGCACC  
ATCAACTCCATTCCGACCTACGCGATGGCTGTGTTCTTCCCATCATTTTTACTGACGAT  
CTGAAGTGGCAGCTAAGCTGGTTTCTCATCCTCACCCTGTAATTTACGCAGTCAACCTG  
CCGTTCAATCCTTTCTTCGGTAGCTTCGGCGACCGCCACGGTTGGGCACGAACGTGTGTT  
TGGGGCGGATCAATCGGTGGCGCAGTCACCCTCGCGTTGGTTTACTTCATTCCGATGTTC  
GGCGTTACAGGTGGCATGTCCAACGGTGTGCTTTTCGGAATCACCATCGCAGCCGGCGCA  
CTCTTTGGTGTGTCCCTCGCGGGCTTCGTGCCACTTTCGCAATCGCTGTCTCCCTTGAT  
CCCAAGCACCCCGGCGCAGCGATGGCCACATACAACCTCGGCGTTGGTGGCGCTGTAGCT  
GTGGGACCGCTCCTGGTTGCAGTCTTCCACCCACTGATTGGTCCAACCGGATTGATCCTG  
GTCATGATCGCCCTCTACCTGCTCTCCGGTTGGATGACTCTTCAACTTCGCGGCACCCAA  
CCAGGATTTCGACGGAGTGCCAGCACTTGCTGAAGACGCCACATCGAAGACCTTGAGAT  
GTAAACGCAAACGCC

>RXN00033-downstream  
TAACTGTTTTTCGAGCTAAACCC

>RXN00056-upstream  
ATATGAATTTAATAATAGATTCCGAACGAAATCGGTGTTAGCGTCTGTGCTGAAACAATC  
TAATCGCGTTTTTCAGGACACCTACATGATCAGGAGCTCTTT

>RXN00056  
TTGTTAAACAGAGTCAGTCGTATTGACGGCGCTTCTGCAATCACACTATGCATCGGCTTA  
ACCACAATACTAAGCCCTACTTCCACTGCACAAAGCCTCGAACAGATCACCCCTTTACCT  
GAATCTGCAATCGACCTCAACGCGGAGATTACGTAACACAAAGCGACATTTTCAGCTGAA  
CAGATCCTTGGTGCTCAAGATGAAATCACAACATGTACGATTCTCATGACCCCTACGAG  
TACTTCGATACCCCTACCGACATCGAACAGCGTTCAATAATAGCAGCGCTTAAACGGGAT  
CCGAGTTCACTCCAACAGCCCAAGAAACCCGCTCTCGCGGCACAGTCCGACCCCTACAAA  
ATTTACATATCAGGCCTCGAAATGCTTTCATGCATCAATCTAGTTGATGTTGTATCATGC  
GGGATTGCAAACCAAGCAGCAACCAAAAGCAAATAATGAGGCTGTGCGACGATACCCAGGC  
GATTCCCTTCGCAACGGCAAAGGCGATGCATTTTCGGCATTTGCTCATGGAACGCTCTGATG  
ACGATACGAATCGGGAGCAATGGAGCTGAAAGAATTGCAACAAACCACGAGACAATCGGG  
GACGGTCCGGCCGATGAAATGCAATGGACCTATTCAATAATGCACAAGGCCGACAGATC  
GGAGCCGGATTATTAATAGTAAGGATGAAACTAGCGCGCTCGCGATATGCGCGCTGTGG  
ACAAATCTCGGTAGACTAAAACTCTAAAA

>RXN00056-downstream  
TAAGCAAGGTGCCCTCTGATGCT

>RXN00067-upstream

GGAATCCCGCATGTTGGGCTCCAGTTGGGGACTGACTCTGTTTTTGATCATTTTGACGCC  
AATCATTATTTTCTCACTTTCAGCTAAAAGGACCATGCA

>RXN00067

ATGGTAGACGCTCAGCGCCCCAAAGCAGGCATCTTCGGTAGCCACACAGAAGAAACATGG  
GTGTGGCTCGGTAATGAACCTTTTCGACGAGTCCGGCGAGGTCATCGCCGACGTTTCGCTCC  
GACGTCCCTCTACGTGGATCGCGAACGACTACTCATCGAATCCACCCCGGCACCATGCGT  
TTTCGTTGCCGCGCAACACTGTCCGGGGGTGAGGTCTATACGATGACTCAGAATTCCTTC  
ACTGTGGGGATCTCACTGCGGTGTGCGGGCGCCGACGTATTCATAAAAAGGGTGTTCG  
CCGTGGCGTAAAGAACGCTGATCACCACAAATGGGGTGGAAGTGGCGCGGCTTCGCCCCG  
ATGACCAGCGGTAAAGTCGAATTCATTGTGGGCACCGCGGGCAGCGAGGCGTTGCCGTTTC  
GTGACGCGAGTATTTTGTAGCTGGGCGTGCGTCTGGTGGATTTCGCGCGTGCGCCGGCCG  
AAAATT

>RXN00067-downstream

TAAAAGCTTTTGTCTTATCGACG

>RXN00077-upstream

CTAAATTGTTTTAACGCGTGAAGCAGTCCCCGCCGATTTATTCGAGGCGGGGACTTTTCG  
CTTTCGGGATAAAAATTGCAACGCACTACACTGAGCAGT

>RXN00077

ATGAATGATGAGAATATTTCAAAGCTCCAACATATCAGCCATTTCCCGAGTTTGTACGATTGG  
AAACAGATCGAGGTGTCGCTCTTAGATGTCATCGAATCCTCACGCCATTTTCTGATTGG  
AAAGATAGCACTGATCGTTCTGCGTTAGATGCTGCGCTAGAGAGAGCAAAAAGAGCTGCC  
GCAGTTGATACCAATGCCATAGAAGGAATCTTCCAACTGATCGCGGTTTATCCCATACA  
GTTGCAACGCAGGTAGGGGCTTGGGAGCAACAAATGGCGATGAAAGGCAAACATGTTAAG  
CCTGCGTTTGTACGATACTCTAGAAGGCTTTGAGTATGTTCTCGATGCAGTAACCTGGTAGA  
ACTCCAATCTCTCAGCAATGGATTAGAAATTTGCACGCCGTCATTTCTGCGGAGCCAAGAA  
AGCCACGAGGTTTTCACAGCCGTTGGAGTCCAAAATCAGGCGCTTCAGAAAGGCGAGTAT  
AAAACCTCAGCCAAATAGTCCACAGCGCTCAGATGGATCTGTACATGCATACGCCCCAGTT  
GAAGATACTCCTGCTGAAATGGCTAGATTTATTTTCAGAACTTGAATCTAAGGAATTCTTA  
GCAGCCGAGAAGGTTATTCAAGCTGCCTATGCCCCTATGCTTTTCGTATGTATTATCCTT  
TTTGCAGATGGGAATGGACGAGTTGCACGAGCCTTGGCTAGTGTTTTCTATACAAAGAT  
CCTGGTGTCCCTCTCGTAATCTACCAAGATCAACGCAGAGATTACATCCATGCTCTAGAA  
GCAGCGGACAAGAATAACCCGCTCCTGCTGATTAGATTCTTTGCTGAACGAGTGACCGAT  
ACTATTAACCTCTATTATCGTTGATCTCACTACCCCGATCGCGGGTAAATCTGGTTTCGGCT  
AAGCTTTCGGATGCGCTACGCCCCACTCGCGTATTACCAGAATTACATGATGCTGCACAT  
AGGCTCCAAGAAAGTTTATTTACAGAAATCCGATCTCGATTGGATGAAGAAGGAAAAAGG  
AATGGGTTGGAGTTTCTACTTCAACGGATTTTATCGGTTCCCATTTCAATCTGCCAGAG  
GGCTATAACGCTTCTCCCTGATAGCTATTGTCTGACCTTAGCTTTCAATAGCAACTCTCCA  
AAACAAATCTTCCACCCGCTATCCATAGTAATAGCAGCTCGAGATGGGAAAAGAGCGAGC  
AGCGACCTCGTGGCAGCTACTTCTATTGGATACAACTTTCACGCTTACGGACGTGAAGTC  
GAGCCTGTTGTTACTGAAAGCTTTTCGAGAACGTGTGAAAATTTACGCCGACGGGATTGTA  
GATCACTTCTTAACCGAAGTGGCTAAAAAGTTTCAACAGAAT

>RXN00077-downstream

TAATTAGCCTATCTCGGCTTTTCG

>RXN00080-upstream

ATGTTCTTGTTCCTCATGATGAGCTCCGTGGTCTACCTCGCATTCGATGTGGGCTTGG  
GACTTAATCTTCCTTCGGACTTTTGGGTGGTGGCTTTTA

>RXN00080

ATGGATATTTTGTCCCTCTTGATGGAAGGTTTCGCCGGCGCGCTAACGCCGATGAACCTC  
CTCTGGGTGATTGTTCGGCTGTTTGCTCGGCACCGCGGTGGCGTCATGCCTGGTCTTGGA  
TCCTCCATGGCTGTGGCGCTGCTGCTGCCAATGACCTTCGCGCTTGATCCAACTGCCGCG  
TTCAATTATGTTCTCTGGCGTATATTTTCGGTGGTCTCTTCGGTGACTCCACGATGGCAATT  
TTGATGAACACCCAGGTACGGCATCGGCAATCGCCTCAACATTTCGAGGGCCACCGCATG

GCTCTTAACGGCCGTGCGCCACAGGCTCTGGCTACCGCAGCGATCGGTGCCTTCATCGGC  
GGTATCGTCTCCTCCTTCATCGTGGTCTTCCTCGCACCAACCTGGCGGAACGTGCCACC  
GCATTGGCCCCCGCGAGTACTTCGCACTGGCACTCTTCGCGTTCGTGCGCACCTCCTCC  
GTGGTGTCCGACTCCGTGTTTAAGGGACTTGCGTCCCTCATTTTCGGCCCTCGGCATTGCG  
ACCATCGGCATCGATTTCGGTCACCGGCATCGAGCGCTTCACGCTCGGGGCACCGCAGCTT  
TTCGACGGAATTTCCCTCGTTACTGTTACCGTCGCGATTTTGGCACTGGGAGAAGTGTTT  
TACATTGCAGCCCCGCGCACGCCGTGACAAAGCAAATCTGGAGACGCGCTCTGCAGGCCGT  
CCGTGGCTTACCGGAACGGAATTCAAAGAAGCCGCTCCAGCCTGGGCACGCGGAACCATC  
ATTGGTCTGCCTTTCCGTGTGATCCCTGTTGGTGGATCTGAAGTTCCAACCTTCTTGGCT  
TACTCCACCGAGCGCGCATTTGGATAAACGACGCAAAGATCCGCAGTTTCGGCGATAAAGGT  
GCAATCCGAGGACTCGCTGCTCCTGAAGCTCGAGGTAACGCCACCACAGGCATGGCGATG  
GGCGCTCTTCTTGCCCTGGGTCTCCAGTCTCTGCAACTGCGGCCATCATGTTGGCAGCG  
TTCCGCCAGTACGGAATCCAGCCCGGACCCTACTCTTCGATCGCAACCTGAACCTGTGTC  
TGGGCACTTCTTGCCAGCTTCTTCATCGCGATGATCGTCTGCTGTTTCATCAACCTGCCG  
TTCGCACAGCTGTGGGCAAAGCTCCTGCTCATTCCAAACCACTACCTCTACTCCGGCATC  
GCATTGTTCTGTGGCCTGGGCATTTACGCCACCTCCGGCGCAGTGTTTCGACCTGCTCATG  
CTGCTCGGCATCGGTGTCGTGGCTTTGATCATGCGTTCGCTACGGTTACCCGCTGGCACCG  
CTGATGATCGGTATGGTTCCTGGACCTTTGGCTGAAACCTCCCTCCGCGACGCACTACTG  
TCCTCGGTTGGCGATTTCTCCATCCTCGTCTCCAGCCCCATCACCTGGTCTCTCTACGCA  
GTGCTCGCCATCTTTCATCGCGTCAAGTGTCTACATGCAATCCGCGGTCTGTCGCAAGCAC  
CTGACTTCTCAGCTCGAAACCATCGACGCT

>RXN00080-downstream  
TAAAGTCCCCGTATAGAAACAGG

>RXN00087-upstream  
TCGTCACTCAACAAACGTTTTCACCCCGGAGGTCTCCCCGTGTCTACCGAAATCCACAA  
CGCCCCACCCAAGGCCCAACTTGGCTTGGCTGGGTGCTC

>RXN00087  
ATGATCGGCGGAATAATCGGCCTCATTTTGTGGTGATCATCATGGCCGAAAACTTGCC  
ATCCTCGAGGATCCCGGTCACATCACCAGCTGCGATTTCAATGCAGTCCTAGCTTGTGGC  
GATGTTCATGCGTTCCGGCCAAGCTAACGCGTTCGGCATCCCGAATCCGCTCATCGGCATC  
GCCGGTTTCGCCGCTGTGCGCATCATCGGCGCCGGCATCCTCGCGGGCGGGGGTTCCGC  
GGTTGGTTCTGGTTCGGCGCCAGGCCGACTCACTTTGCCATGATGTTCTGCCACTGG  
CTCGCTACCAATCCATGTCCGTATCCGCGCGCTCTGCCCTTACTGCATGGGCGTGTGG  
ACCGTATCGATCATCATGTTCTGTGCTGGTCACTGCATGGAATGTGAAAACCTTCAGCGGC  
TCCGACAGCACGTTTCGTCAACGCACTGTACAAATACAAGTGGGTTCATCGCGATCGTCTGG  
CTGCTGCTCATCGCAGCCGAGCTGTGTGGTCAATCCGCTACATGTTT

>RXN00087-downstream  
TAGGCATTTAAGGCTTTCAGGCC

>RXN00096-upstream  
GGGGAACCTGGGGTAAAAGGAGAAGTATTTCATTACCCCAATAACCTACTAGGTGGGGTGG  
ACACGCATAGTCGACAGCCAGACGTGGCAGAATAGTGTGC

>RXN00096  
ATGACTAATGCAGGTGACAACCTTCGAGATCAGGATGCCTTCTGGCACGGATGACCCATTG  
TCCGATGCGGAGATCCAAAAGTATCGCGAGGAGATCAACCGCTTGGACCGCGAAATCCTC  
GATGCGGTGAAACGCCGCACGAAGATTTCCCAAACCATCGGAAAAACACGCATGAGCTCG  
GGCGGAACACGTCTCGTGCACACCCGAGAAGTAGCAATCATCAACCAATTCCGTGAAGAG  
ATCGGCGAGGAAGGCCCTGCCCTCGCTGGAATTTTGCTGCGCATGGGACGCGGAAAACTC  
GGA

>RXN00096-downstream  
TAAGTTATCCACAGGTAGAAAAA

>RXN00097-upstream  
TCAGGGTTTTAGCCGTTGATGGGCAGAGTTATCCACAGGTTTTTAGCGAGCTGGTTTCCG  
ACGAAGAAAATAGTGGATAGGTTACAGGGCAGAATCCCCGA

>RXN00097

ATGGAGGTGCCTTCCTTGTTTACCAACTTCTTCGCAGTCAACAACCCAGACAGTCCGCCC  
GCACGACAAAAAACCAAACTCAGAGAACTGGAACACCGCTTCTGGCAAGAACACCTGCCA  
GGCGACGACGATGACCATTCACCGCAATCTCCAGCCTCGCCATCGTCACAGGTCTAACA  
AAAGCGCAGGTCTCCCGCATATCCATCGCGTTTGCCACGCTCGCCGACTTGCCCGAACTC  
AAAGCCCTGCAACAAAAGCTGTACCACCTCGACCTCTCCCGACTGATCACCATTAGCAAC  
GAACTCGCCGGCATCAACCCCGACAACCTCGCCGGCGCCGACGCAATCCTCACCGAATAC  
CTCACCGCCACCAGCCCCAACAGATTCTGCCAAGCCCGGCGTCCATAGGACGCAAGATA  
AAAGAAATAAGAGATTGTGTTGACGACGCAAGAGCCACCGGTTCGCGCGGTACCCAAGAC  
GACAGCTCTTTTCGGAGTGACCTTCTCCCCAGACGGAACCGCCGAAATCGGAGCCTCCGTC  
GATGCTGTGGACGGGCACATCATCAACGACGCCGTACCCAACACGCGAAGAAAAACGAC  
CTCACCCTACGGCGAAGCTTTCAGCGACATCCTTCGGAACAATATCCAAGTCAAGGTAGTC  
CTCAACTTGTACACCGCCAAAGACCTCGCCAACGCCCCAGTGTGGGCCAGCGGAATCGGC  
TGGTTGGATGCCAAGACTGGAACATTCTGGTCAGAGAAAGCCAACAAAGAACAAGACATG  
GATGCGGCTGCCAAAATCAGCACCGACAAACACGATCCTCCACCAGCGTTGCGTGACGCA  
CTCATTGGTTCGTGATGGCACCTGCCGATTCCCTGGCTGTTTCAAGTCCCAGCGCTCAAAACC  
CAAGCCGACCACCGCATCCCCACGAAGAAGGCGGAGAACTTGCCCTAGGCGGAATCGGC  
TGCCTCTGTCAACACCACCACAACATGAAAACCGACGGCCGAGTCACCTACCTTCTCGAT  
CCCTTCTCCGGCATCATCGTCTGGCTCATGGGAGACGGAACATGGGCAGTGTGAGAACCC  
AACGGGCCGCTCAATCCCAAAAATGCGAGATGGGCGCAAAACAGTCGCCCAACACCGGGCA  
CGCCACCACAAGCGTTGGGTTAAGGAGGACGCCAAG

>RXN00097-downstream

TAGCCGGATGGCCACGTCGAAAA

>RXN00114-upstream

TGCATTCCCTAACGGGAATGCAGCTTTTTTGTGTTCTTAGTGCAAATCGAAATCTCATGTG  
ATTTACTTAAAACCTAATTAAATCTACTATCGGAGATCTC

>RXN00114

ATGAAACTTCTCAAGTTTGCTGCAGCAGGAACCTTCGCCTAGCCCTGGCTGGCTGCACA  
CAGACTGAGTCTCTCGTAGCAACAATCGAATCTGCAACCTCTGCAGCACAGGCATCCGGA  
AACGACGTAGAAGGAGACCAAACTCCGCGTTTCAACTCTCCGTTGGCGAATGCTTCAAC  
GACACCTACGAAGAAGAAATCTCCGAAGTACCCATCGTCGACTGCGCAGAACCTCACGAC  
AACGAGATCTACTACCTCTACGACATCGAAGGCGACGACTTCCCAACCGACATCACCACC  
ACAGGCTACGAAGGCTGCCTCCCAACATTTGAAGGCTTCGTAGGAGCTCCTTACGAAACC  
TCCATCTACGAGGTCTACCCAATGACCCCAACCTTTGGCTCCTGGACAAACGGCGACCGC  
GAGGTAGTGTGCTCCGTGTACTTGGCCACCGGTGAGCAGATGACCGGAACCGCAGCAGGA  
ACCGCGCAG

>RXN00114-downstream

TAGATTTTGGATAGGGAATTTTG

>RXN00120-upstream

ACAAACTCTTAATTTAATGAGACGTAAGTAGTTGATAGTTAGGGGAAATACTCCCAAATC  
CTCACAGGAAACGCTCTGAATTCTTTCAAAAAATGTTTC

>RXN00120

ATGCTTATTGGCATGAGCAATCAAACAGTCAATCAAGCAGTGTCGTCAGGGGTGAAAGCA  
TCCCCGCACAGGTTCAATCGTTTGAATCAAATACTTGATTACAGAGCAAGATGTACCT  
GCACTCCGCGAGCAGTTGGCAACGAGGATGAGCACGGATCCGCTTTCCCCACCGGAGGC  
TACCGAGTGGAATCCCTTTACTTCGATTACGCCGATTTACGGTGCTACACCGAAAAGATC  
GAGGGTCTGAAATTCGGAAGGAACTACGGATCCGTACCTACGGTGATGGAGTGCTCACT  
CCAGAATCCACCGTGTCGGTAGAGATCAAGCAGCGGTTAACAAAGTAACCTCAAAGCGT  
CGGCTGGATTTGCCCTTTATATATGCGCTCGCCCTGGGCGATAGCACGGGCGCCGCGGTA  
GGCGAGCAGGTGGACGTCGAGAAGCTTCTTGAATCTCTCCGGAACACGACGCTTTG  
ATTACCGAAATGGCGTCGTTTGGCTAAATAATATCGGCTGCGACCCATCGCCACCACGAAG  
TATCACCGGAGGCATTTCGTCGGCGCTGATGCGGAGGAAAGTTTCGCGAGTCACCATTGAC  
CACGGTGTTCAGGCCGTGATCGTGATTTTCTGCTTGGCCAAGACCTTGAAGACCGCCCA  
ACGGTGGCGCAAGGATTGGCAGTCGTGGAATCAAATGCGATGAACGCGTGCCGTTTTTG

CTCACTGATATGACTGCTCAACTGGAAATGTCCGTGATTCGGATGTCCAAATACTGCGAA  
ACCATCGAAGCGTTTCACAACCGTCCGGCATCAGCTTTCGGCGCTGTCGACCCCATCTTC

>RXN00120-downstream  
TAAACAAGAAAGGCCCTCCAAT

>RXN00128-upstream  
CCATTTTCCGTTTGGTCTTGCCATAAGAACCGCATGGAAATTATCGTGAAGCACCGATCC  
CGTTGATCGCTCCAGAGACACCGTGGGAAGGGGAGCAGCA

>RXN00128  
GTGAGTAAAAATTTTCGACGAACTGAAGGCCCTCACCGCGGTGCTGTCTGTGACCACTCTG  
GTGGCTGGGTGTTCCACGCTTCCGCAGAACACGGATCCGCAAGTGTGCGCTCATTTTCC  
GGTCCCAAAGCACACAAGAGATAGCAGGGCCGACCCGAATCAAGATCCGGATTTGTTG  
ATCCGCGGCTTCTTCAGCGCAGGTGCGTATCCGACTCAGCAGTATGAAGCGGCGAAGGCG  
TATCTGACGGAAGGGACGCGCAGCACGTGGAATCCGGCTGCGTCGACTCGTATTTTGGAT  
CGCATTGATCTGAACACTCTGCCAGGTTCGACGAATGCGGAACGAACGATTGCGATCCGT  
GGAACGCAGGTGCGAACGTTGCTCAGCGGTGGCGTGTATCAGCCGGAGAATGCGGAGTTT  
GAAGCTGAGATCACGATGCGTCGGGAAGATGGGGAGTGGCGTATCGATGCTTTGCCGGAC  
GGGATTTTATTAGAGAGAAACGATCTGCGGAACCATTAACCTCCGCACGATGTGTATTTT  
TTTGATCCTTCTGGCCAGGTGTTGGTGGGGGATCGGCGTGGTTGTTCAATGAGTCGCAG  
TCGATGTCCACGGTGTGATGGCCCTTCTGGTTAATGGTCCCTTCGCCGGCAATTTCTCCT  
GGTGTGGTCAATCAGCTGTCCACGGATGCGTCGTTTCGTGGGGTTCAATGATGGGGAGTAT  
CAGTTCACTGTTTGGGAAATTTGGATGATGATGCGCGTTTGCCTTCGCCGCCAGGCC  
GTGTGGACGTTGGCGCATGCTGATGTGCGAGGCCCTACACTTTGGTTCGCTGACGGCGCG  
CCGTGCTGTCGGAGTTCCCAACGCTCACACCGATGACCTCGCCGAATACAACCCAGAG  
GCTTACACCAACACGGTGTCCACGTTGTTTGCCTTGCAGGATGGATCGTTGTCGAGGGTC  
AGTTCCGGCAATGTGAGTCCACTACAGGGCATTTGGAGCGGTGGAGATATCGATTCTGCA  
GCGATTTCTCCTCCGCCAATGTGGTGGCAGCGGTACGCCACGAAAACAACGAGGCAGTG  
CTTACTGTTGGCTCCATGGAAGGCGTGACTTCAGATGCGTTGAGGAGTGAACGATCACT  
CGTCCCACCTTTGAATACGCGTTCGAGTGGGTTGTGGGCTGTGGTGGATGGGGAGACGCCT  
GTCCGAGTCGCACGATCGGCAACAACCGGTGAGCTCGTCCAGACGGAGGCGGAGATTGTG  
CTGCCAAGGGATGTGACGGGTCCGATCTCTGAATTCCAACGTGTACGAACTGGGGTCCGG  
GCCGCCATGATCATTGAAGGCAAGGTGTACGTGGGCGTCGTAACGCGTCCTGGTCCGGGC  
GAGCGGCGCGTGACAAATATCACGGAGGTGGCGCCGAGCTTGGGCGAGGCGGCGCTGTG  
ATCAACTGGCGCCAGACGGCATTTTGCTTGTGGGCACGTCAATTCCAGAGACGCCGCTG  
TGGCGGTCGAGCAGGACGGATCGGCGATTTTCGTCGATGCCGAGCGGGAATCTCAGCGCG  
CCGGTGGTGGCGGTGGCAAGTTCCGCGACGACGGTCTACGTCACTGATTGCGATGCGATG  
CTTCAGCTGCCGACTGCCGATAATGATATTTGGCGCGAGGTGCCCGGTTTGCTGGGCACG  
CGTGCGGCGCCGGTGGTTGCGTAC

>RXN00128-downstream  
TGATGGAGCTGTTCTTCCCGCGC

>RXN00154-upstream  
TAGCCAGACGGCAGTATTTTGAAGCGGTGAATAAACGTTTGCTCGAATTTCCATAGTGTT  
AGGGAAGTGATGTCAGTGCTTTGACTAGGGTGGTGAGCT

>RXN00154  
ATGAGTTTTTCAGACCCCTATGCAGGCAATATTTTTGGTGGACACTCCCGCAACAAGCAG  
CCGGAGTATCCCGATGTGCCCGAAAACAGGCCCTTGTTGGTGGAAAGTTTCGTGGAGATGGC  
TTCGTCCGCGCTGTGACCGGTTTTGAACGCACCTACGATGGTGATTTTGTGCGTCTCGAG  
GACCGCCGCGGACGCGATGCGCTGTACAAGCTGCGCAAGGGTGCCTTCATGATTGATGGG  
CAGATCGTTAACCTCACCCGTTTTCGTGGAAAAACAAGCACACGTAAATCTAATTCTGGT  
TCCAGGCGTGTAGAAAACGCGCAAGCAAAAGGTGCGGCGCCGTCACGCATCTGGGTAGAA  
GGCATCCATGACGCCGCCATCGTGGAGAAAGTGTGGGGACACGACCTTCGCGTTGAGGGC  
GTCGTGGTGGAGTACCTGGAAGGTCTAGACAACCTGGAGGAACGTCTCGCGGAATTTTCAG  
CCTGGGCGCTGGACGACGATCGGAGTGCTCGCTGATCACCTTGTGAGGGATCTAAAGAA  
ACTCGGATGACTAAATCACTACCCGCGGATGTGCGTGTACCCGGCCACCCCTACATCGAT  
ATTTGGGCTGCTGTGAAACCAGAGCGTTTGGGGCTTAAGGCGTGGCCTGAGGTGCCATAC  
GGGGAGGATTGGAAAACCGGCATCTGCAACGAGTTGGCTGGTTCAGACCCCAAAGAAGGC

TGGCACCGTGTGTATAACGCCGTGAATTCCCTCCGCGATTGGACTACACCCTAATTGGG  
GCAGTGGAACGTTTGGTGGATTTTGTGACCAACCTCGATTGAGTAAAGAGGACGTCCTC  
GCC

>RXN00154-downstream  
TGATTTTTCGGGTGTGTTTTTGC

>RXN00162-upstream  
GGAGACGTCGAAAAGCATAAACCTGGAACCTTTCCGGGCCCCGCGCCCGACTGCTTTGCTG  
AAGCCCTATCCCGCTATTTTATTTTGAAGGAAGAGTTGC

>RXN00162  
GTGTCTACCACCACCCCAATCCACCCTGAGCGCAAGAAACGCGTTCGTCAGGCCCTCACC  
ATGTTCTCCATCGCTGCGTGGGTGACTGGTGTGTTTTTGTGCGCTGGTGGCGGAGATG  
ATCATGAAGTACATAATTGGCATGGATCTTCTGAGTGGGCACGATTTCGTTCCGATTGCA  
CATGGATGGGTTTACATTGTTTTCTTGATGACCACCCTGAACCTGGGTCTGAAGGCGCGT  
TGGAATCCGACTCGTTGGGTGACCACCGCTATCGCAGGTGTGGTTCGCTGCTGTCTGTTT  
TTTGTGAGCACAACCGCCGCAAGGAAGTTACTCAGACATTCAGCTGAACCTCA

>RXN00162-downstream  
TAGTTAAATACACAAAACCTCC

>RXN00167-upstream  
CCGACAATCCAGTGGAACCTCCCTATCGCTGTGATGCATTTTACTTTACGTTCCGGTA  
CCCTGGCAGGCAGATCTTCCAATCTTTAGGAGCCCTCGCC

>RXN00167  
ATGTACCTGTTGAATCCACCAGTCACTGAACCCGAGATCCTCACTGTCAACGAGATTCCG  
ACCGTCGTCGCTGTCTTTGACAACCACCCCATGAACGACATGCCCGCAGCATTCGATCAA  
ACCTACCAAGTGCTCTTCCCCACCTTGGGTGCCAAGGGCATCGCGCCAATTGGCCCCGGA  
TTTGCTCTGTACACCTCCGAACCAACTGACACCGTCAGCTTTGAAGTGGGCATCCAGTC  
AGCCAACCACTTGAGGGAGATGTTTCAGCCGCCAGCGGCATCGTGTGAAAACTCAGTG  
GTCCCTGCCGAAAAATTGCGCGAATCAGCCACATCGGCTCATTCGACGGACTGAGCCAA  
GCATGGGGTTTCATTCGTGGAAGCTCTTGAATCTGCAGGCCATGAGATCGATATGCCGTGT  
TGGGAGGTATATGTACCGAGCCTTCCCCCGACATGGATCCCGCAACACTCCAACTGAT  
CTATACGTCTCTGTTGAAG

>RXN00167-downstream  
TAGAGAAGCTTTCTGGTCAAGTT

>RXN00171  
AAAGATCAGCAGAAGCAGATTCATAACTTGGCAGCTGAGGTAAAGCGTCTTCGTGAGCGT  
GACGATGCACGAGATCAGCAGCTAGGAGTGCTTAATGAAGCCATGTTTTCTACTACTAGGA  
GATGGACTTGACCGTTTTCTGTGAATCTGGCGATGAGGCATCCTTCAATGCTGCATTGAAC  
TATCAGGCAGTGTTGGCACCAGAAATGTTTAAAGACCGTGTATGGTGTGATCCGTCTACC  
GGAGAGCCTATTCCCACT

>RXN00171-downstream  
TAAAGTACAACACAGTCTTTTCA

>RXN00194-upstream  
AAATATGAGAACATAGTGAGAGTTAAACCAAGTTCTGTAGGTGCTTGTTGCAGCGGGCGC  
GAAGGCGTACCCTGCAACTTGCGAATAAAGGAGTAAAC

>RXN00194  
GTGGCTGGTTCTCCACACGATTGAGCCTGAGATCTACCGCGGTGTATCCACCCTTGAT  
GAGCCTTCGGCTGCATGGGGATGGCAGGCTCTCAAGCGCAACACCATCCAACCTCGCTGGC  
TGGATTTCCGTTCTGTTCATGTCTGGATACAACCTTCGGTAACCACAAGGGCCACGTTGAA  
ACCATCTGGCTTCTCGTCATCACGCCCTTCTGTCATCGGCCTGCTGATCCACCTGTTT  
GAGCCAAAGCTCTTCCAGGTTTCGACCATCACTTCCCGCAACAAGCCTGTGCGCCACGTC

GAGCCAGACTGGACCTACGACCAGGCAACCCTCACCGGCACCTGGGGTAACCTCACTGAC  
TCCCAGCTTCGCTCCGTCAACATCGAGCCAAGCCGTGTCGCTCACCTGCGTGCTGCAGAT  
TCTGCGAAAGAACTAGACAAC

>RXN00194-downstream  
TAGTTTTTTTAAAAAGAAAATGCG

>RXN00197-upstream  
GTCGATGATATTTTGGCAACCGAATCTGAGGCACGCGCGGTGCGAATGCTTTGATCAAC  
CGGTTGGCAACCAACTTGTAAAGCTAAGGAGCTTCCGCCTC

>RXN00197  
GTGGCAGCCTATCTTCTTGGTGTCTGATTATTTTTCTCGGCATCGCAGTAACCATCGCG  
CTTCACGAGTGGGGGCACTTCATCACAGCGCGCATTTTCGGAATGAAAGTGC GGCGTTTC  
TTCATCGGTTTCGGCCCGACGGTGTGTTGCCAAAAGACGCGCGGAAACCGTGTACGGCCTT  
AAAGCGATTCCGGTTCGGCGGTTTTTGTGACATCGCGGGGATGACTGCCCAAGATGAACCT  
GATCCGGAAGACCTGCCGCGCGCCATGTATCTAAAGCCCTGGTGGCAGCGCATAATTGTG  
CTTTCCGGCGGCGTGATCATGAATCTGATCGTGGCTTTTTGGTGTCTTACGGCGTGCGG  
GTGAGCTCCGGAATCCCGAATCCGGATGTGGATAACACCGCGACAGTCGACACCGTTTCAG  
TGCGTGCCGGAAACCCAAATTTCCGCAACTGAACTGTCTCTCGCTAGGTTTCAGGCCCA  
GCGGGCGACGCCGGCATTTGAGCACGGCGATAAGATTTTGGCCGTCAACGGCCAAGAGATG  
GCAAGCTTCACCGCCATCCGCGATGCGATCCTCGAGCTCCAGGCGAAACGGCAACGCTG  
ACGATTGAACGGGAGGGAACGCTTTTCGACGTGACCTCCAGGTTGCCCTCTGTCACCCGT  
CTCGCCTCTGACGGTTTCAGAAATTACCGTTCGGCGCGGTGGGCATGTCGAGCCTTCCACCG  
ACCGATGTGTACAAAAAATACGGCCCAATCGAGGGTGTGGGAGCAACTGCACGTTTCACC  
GGCGACATGATCAGCGCCACGTGGGATGGCCTCAAAGCCTTCCCGGCGAAAATCCAGGG  
GTCGTGCGATCCATCTTCGGTGCAGAACGAGATGTAGAAAGCCCCATGAGTGTGGTGGGC  
GCCGTACGATCGGCGGCGAATTTGTGCAACGTTCCATGTGGGACATGTTTCATGATGATG  
CTGGCCAGCCTGAACTTCTTCTCGCGCTGTTTAACTCGTGCCGCTGCCACCCTTGAT  
GGCGGACACATTGCCGTGGTGATCTATGAAAAATCCGCGACTTCTTCCGCAAACTGCGC  
GGAAACCAGCGGGCGGCCAGCGGATTACACCAAACTAATGCCCGTCACCGTAGCTGTG  
CGACCTTGTCTGATGACAGTGGGAGGCCTGGTCATTGTGCGCCGATGTGGTCAATCCCATC  
CGACTCTTTGGC

>RXN00197-downstream  
TAACGATACGGAATTGAACTGCC

>RXN00216-upstream  
GTGTTGCTCGCGGCCAGGCAGTGCTGTACCTGCCTGACGCGGATGGTGACATCGTTC  
TTGGATCAGGCACCATCTGCCACACGGAGTCTTAAGAAA

>RXN00216  
TTGGGCGCTTATGGTTTAGGTGAGCTTCCTGGAAAAATCCGCCGCGGAAGCCGCGACATT  
ATTCAGGGTGAAACGGGCGATCTTCTCCATATTCTCAGCTTCCGGCGCGAGGTTTGGGT  
GCTGATCTGATCGGTGCAACCGTCGGTCTGCTGGACATGATCAACGTTGATCGCGGGGCC  
CGATCTTGGGTGATGAGCACACGCCCCAGCAGATTGACGCACCTGACCGGCGATTTCTT  
GACATGGATTGATGCGTGCGAGGAAACCTGGGGAACGGGCGTGCACAAGCTAAAAATC  
CAAGTTGCTGGTCCCTGGACTTTAGGTGCGCGCATTTGAGTTGGCCAATGGCCATCGCGTT  
TTGTCTGATCGCGGTGCGATGCGTGATCTCACGAGGCGCTGATCGCCGGCATCGATGCG  
CATGCACGCAAGGTTGCTGGGCGATTTTCGCGCCGAAAGTGCAGGTGCAAATTGATGAGCCG  
GAGCTGAAATCGCTTATCGACGGCTCCCTCCCTGGCACTTCCACCTTTGACATTATTCTT  
GCGGTGAATGTCGCTGATGCCAGTGAACGTTTGCAGCAGGTCTTTAGCTCGATTGAGGGG  
CCGACATATCTCAACCTCACCAGGCGAGATTCCTACTTGGGATGTGGCTCGGGGTGCGGGC  
GCCGATACTGTGAGATTTCATGGATCAAGTCCGTGGAAATGAACATTTGGATGGTTTTT  
GGTGAAACCATCACCAGTGGAATTCGTCTTGGTTTGGGCATTACGACAGGAAAAGATGTC  
GTAGATGAACTGCTCGAGCGACCGCGGCAAAAGGCCGTTGAGGTAGCACGCTTTTTTGAT  
CGTTTAGGTGTGGGCCGAACTATCTCGTGATGCTGTTGATATTTCATCCGGGTGAGGAT  
TTGGTGCAGGGGACCATCACCGAGGCGCGAGGCTTATCGCATGGCCCGGGTGATGTGCG  
GAGATGTTGTGCAAGGATTTCATGCGACCTT

>RXN00216-downstream



TAAGGCTTTACCGGCGCTGGGTG

>RXN00222-upstream

AGGGAAAACTACCGTCCGCCTGGACAAAGTCATCGATGTACTCCGCGTCCTTGGACTCG  
AGCTTTCTGTTGGAATTCACGATCCCCCTCAAGGTTAATCA

>RXN00222

ATGACCCCCACTGCCGATATCTGGTTTAAAGATACTTTGGCTGCTCATTTTCACACGCGAC  
GGCGACCAGACCACATTTCTCCTACACAGCTGATTACGCAGGTCCACCGATTGCCACGTCC  
CTGCCCATCAATTCTGAACCCGTGATTACGCGCTCTGGAGCGATCCCACCATTTTTTCGCG  
GGATTACTCCCCGAAGGTCGTCGCTTAAGTTCACTCCGGAGAAACATTAAAGCCTCTGCC  
GATGATGAACCTTCACTCCTTCTAGCAGTGGGAGCTGATCCTGTTGGTGCAGTCGCTATC  
TTCCCCCÀTGGTGAAAAACACAACCTGCACCACCCACAGTTGATTTTGACGATGAACCTT  
GATTTCTCGGCTGCACCTAACCGAGTCCGGGATTGCGGATCCCGTTGCACTGGCCGGTGTCT  
CAAGACAAAGCCTCTGCACGCACCATCGCGGTCCCCGTTGCAAGCGATGCCATCTTGA  
CTCTCCCCGCCTGAATACCCCTTACTTGGTGAAAAACGAAGCAGCTTGTTACCAGTTGCTG  
ACCAAAAAATAAGCTTCGCATTGAACTGTCCAAAGTAGAAGTTCTCCATGACAAACACGGC  
AGGTCCGGAATCTTAGTTTACCGCTTTGACCGCACACCCAAAGGCAAAATCCCCGTCGAG  
GATGCAGGACAGGTCTTGGGAATCTGGCCTGCAGATAAATACTTAGTGAGCTACGAGGAC  
ATCGCACAAAGCCCTCACTAAAGTGTGCGCCTCCCCATCTTGGCGATGCGCAATCTCGCC  
TTCCAAATCGCAGTCGCGTGGCTCAGCGGCAATGGTGATCTTCATGCCAAGAACATCTCC  
ATTATCAACAAAGGCCGCGGATTTGAGATCAGCCCCATCTATGACATCCCTGCCACCGCA  
GTATATGGCGACACCACGATGGCATTAGAAATCCAGGGATCCAAAAAGGATCTCAGCCAA  
AAGAAATTCCTAAAAATCTGTACATCCATCGGACTACCAGAAAAACAGCCATGTCGGTT  
GCGAACGCTGCACCTGTTGGCAACAGAAAATGCCGACAGAGACAATCTTGCTTCGGGAAAT  
TTTGATACACGGATGAATCGAGATCTGGCCAGGGTTCTCAAAACATCGACGAAGCGCATGG  
GGAGCT

>RXN00222-downstream

TAATTCGCCTGTTTAAAGAGGTCTG

>RXN00232-upstream

GCTGAAAAAACTCCCAATTTGGACAATGAACACTTGTCAAAATGGGAGTTTGGATTTTCG  
CACCACCGGCAGCACTCGAAAACGTGTTTATACTTGAAT

>RXN00232

ATGAACGACAGGGCTCACCAACGAATAGGCGACATCGAGCGATCCCAAGCCCTCGACCGA  
CTTGGGTCATATTTTGCAGACGGATACCTCGACATCGACGAATTCGATACCCGAACCGGC  
GCCGACGAATCGCACGCACAGCCGGTGAATAGATGTCTTGTTCACAGATCTTCCCGAA  
CAACAGGCAAGCACCGCCGTGACACCCGTGCAAGACGATACCGAGAAAGAATTAGACCTG  
GTCTTACAGCGAGGAAAGTCAAGCAGATCGACTCCGCCATTTGGGCTGTCGTGATG  
GTCTCGTTCTTCCTAGGCTTGTGTTGTTTCAACGTGCCATATTTCTGGGTTGTGTTTCATC  
CTTGGCGGAGCGGCCCTCCGCGGGTGCAGGATCTTGTCTCAAAGTAGATGACGCCGATGAA  
AAACTCTTTGAGGAATCCACAGCAAGGAACAAAGCGAACGCGAAGCACGCCTACGCATT  
GCGGCACAACGTCGACGCGAGTTGGAACAA

>RXN00232-downstream

TAGCCACAAAAGCTATCAAGCCC

>RXN00236-upstream

AATGCGAGAGTTCTAAACGAGCCGGTAACATCGACCCCCATGAGTTACAGGGGTTAGAAA  
AGCAATGGGATTTGGATGCGGTTTCGGTTTTGGCCGTCATC

>RXN00236

ATGGTGATCTCATTTGTTGGATGGGCGCTCAGCTTCATGGATGGAACGGCACCTATTTCGC  
CAACTCCAGCAAATCCCTGAAGATGTTCCGCCGCGCGTGGTGTAGAAGTTCCGCAAATT  
GATACAGAGGCAGATGGACGCACATCCAACCATTTGCGTTTTTGGGCGGAACCAATTGCT  
CAAGATACTGGTGTGTCGCTCAAGCGATTGCGGCTTATGGAACGCAGAGCTCATCGCG  
AGTACTGCGTGGCCTGGCTGAATCTGGGGTGGAATACCTTGGCAGGTATCGGCCAGGTG  
GAAACCCGTCACGGTACCTACAACGGCAAAATGTTTCGGGGGCAGTTCCCTGGATGAAAAAT  
GGAGTTGCAACCCCTCCAATCATCGGCGTTCCACTTGATGGTTACCGGGGTTTGCGGAA

ATTCCCGACACTGATGGTGGGGAATTAGATGGCGATACTGAATATGATCGCGCGGTAGGT  
 CCCATGCAGTTTCATTCCGGAACCGTGGCGACTTATGGGATTGGATGCAAACGGTGATGGG  
 GTAGCGGACCCCAACCAAATTGATGACGCAGCATTGAGTGCCGCAAACCTGTTGTGTTCC  
 AACGATCGTGACTTGTCCACTCCTGAAGGATGGACCGCAGCTGTTTCATTCTTACAACATG  
 TCTAATCAGTATTTGATGGACGTTTCGAGATGCTGCCGCGTCTACGCTTTACGACAGCCG  
 CGCATC

>RXN00236-downstream  
 TAAAACTTAACAAGCGCAACCCC

>RXN00242-upstream  
 GGATCACTATCGCTTTAAACACCGAAACCTTCCTGCTAGTTCACCAAGATTTTAAAGTTT  
 TACCGCAATTTCTTGAGAGCTTTGGGAGGATAATGGCGGT

>RXN00242  
 GTGAATGAATGGCGAACAGTCTCGCTTGTAGATTCCACGGCGCTGACCGTGATCATCAGT  
 GTGGCCGTGTTTACTTCTGCTGTGGCTCTGCTCGGAGTTGTGAAAAAGCGCTCTCGGTGG  
 CGGGTTCTCGGAGCTCTCATCTCCTCAGCAGTTCTCACCAGTGGCGCATGGGTGGTTATT  
 GAAAAGCTGTGGAAGCCTTTCCCGACCCCAATCCGTGGACCATCTATCTTCCGCTGGT  
 TTGGCGGTTTTTCTCTGTGTGAGCATCTTGTTCGCGACTGGTTCGTACAAGAATACTGATG  
 GCTACACTCACCCTGATTGCACTGGTTAATACGGCCGCAGTCATCAATGTCATCTACCAG  
 CCATACCCGACGTTGGGTTCCTTCAATCCCGTGCCAACGGCTGTGTCCATGTCTGATGCA  
 GATTTTGAATCTCAGACCACTGCCCCGACGATGGATGACCGTGAAGTCGGTGCCCTTGTG  
 CAGGTGCCGCTAGCTGGAACAACAGATGATTCCACCTCCGGCTTTGATGCGCGCGATGCC  
 TACGCCTATATTCGCGCTGCGTATTGGGATAATCCTTCCCTACAACGCGAGTTTGGTT  
 CTCATGCCCCGAAACCCCGGCCAGCCAGATCAGTGGTTTAGCAGTGGAATGCCGATCAA  
 ACAGCAGATAATTTCCAAGCAACCCACGATGGCATCAGCCCCATTGTCATCAGCGTGGAT  
 GGCACAGGATCATTCAGCGGAAACCTTGCTTGCCTGGATTCTGATGCCCAAAGCGTGATG  
 ACATATCTATCCCACGATGTCCCCATGTTGATCAAACAGAAATTCGAGTCAATCAGGAT  
 CAGCGCACCTGGACAATTGGTGGTTTAAAGTTACGGCGGCACCTGTGCTTTGCAGATCATG  
 ACCAATCACCCCGAAGCGTATGGTTCTTTCTTGAATCTCTCGGGCCAGGAAGAACCAACA  
 CTTGGCACACGCCAGCAAACTGTTGATCAGCTTTTCGGCGCGATGAAGACGCATTCAA  
 GCCGTTAATCCGGAAGATCTGCTCAATCAAGCAATCAGCTCAGGAGCGCATACCTACAGC  
 GGGATTTTCGGGCAGGTTTATGTGCTGGTAGCAACGATAAAAAGTGCAGTGAGCGCGCTGTCT  
 CATCTTGATAATTTGAGCAATCAGGCGGGCATGTCCACCACCTTTGATACCGTGGCCGGT  
 GGACATTCCTTCCAGGTGTGGCGCGTGGCTTTAGCGAATACTTTTGATTGGGTTGCCAAG  
 CGCGGCGGATTGCAGGTT

>RXN00242-downstream  
 TAACAATGAAAGACGCTTCACAG

>RXN00247-upstream  
 AACCCTAACTACTGACCTCGCACCCTTGTTGCAGCCCGTTACCACGCTGCATTGAGCG  
 CACTGCTGGCACATATCTAAGACCGCTAAGGAAATCAGCT

>RXN00247  
 ATGCAGACATTAATCTTTATCGCCATTGCAGGCGTCGCAGCACAGCTTGTTGATGGCGGC  
 CTCGGCATGGGGTTTCGGCGTCACCTCAACCACCATCCTCATCATGCTCGCAGGTTTAGGC  
 CCTGCGCAGGCATCCGCCGTCGTGCACACCGCAGAGTTGGAACCACCTTAGTTTCTGGT  
 TTAAGCCACTGGAAATTTGGCAACGTGGATTGGAAAGTAGTTGTCCGGCTCGGTATCCCC  
 GGCGCTATCGGCGCATTTGCTGGCGCTACCTTCTTGTCCAATATTTCCACCGAAGCAGCA  
 GCACCGATCACCTCCCTGATTCTTGCCCTGATCGGCATGAACCTAGTCTGGCGATTACAGC  
 AAGGGACGCATCCGCCGCGACTATTCCGATCGCCGCACAGCAGGGGATTCTTCGGCGGA  
 CTCGGTATTGTGCGGTGGTTTTCGTTGACGCATCCGGTGGCGGCGGATGGGGTCCAGTGACC  
 ACCTCTACGCTGCTGTCTTTGGGACGCACCGAACCCCGCAAAGTAGTCCGCACCGTCAAC  
 ACCGCAGAATCTTAGTCTCCCTAGCCGCAACATTGGGCTTCGTCGTGGGACTGTGGGAT  
 GACCTAGTAGCTAACCTCTCTGCAGTTCTCGCGTTGCTCATCGGCGGCGCAATCGCAGCA  
 CCAATCGGCGCCTGGATGATCTCTCGCGTTAATGCAACCGTCCCTCGGTGGCTTCGTGGGC  
 ACCCTGATTGTACACTGAACCTGCCAAAGGTGCTCAACGTGGTTGGCCTTGATTTTCATC  
 CCCACCGGCCATCCAGGTACCGTCCCTCATCGGCCGCGCTGACGTACCTCGGC  
 TTCCGCCGCTACCGCAAAATCTCCTCAACGAGACCATCTCCAGCGAAGTTGTCTCCGAA

CCAAAGGGCCAAAAGATTAAAAGCACT

>RXN00247-downstream  
TAAAAACACGCTTTTCGACGCCCA

>RXN00256-upstream  
AATTAATCAATCAGAAAAACATATTGAATACTTATAAAATTTCTGACATACTCATTAATGA  
GATATTGCAAGTCCTTTATCAAAATGATTAACAAAAGGAGT

>RXN00256  
ATGTTTATGTCGCTAAAAACTCGCCGAATATTCGGCGCACTTGCTGTTTCGCTATCAATC  
TCTTTCTCAGCCATTGCTACACCTGCAGCATCCGCACAAGAACTAGTGGTGAGCACATCA  
GCAGTAAACGAATTTGGTGTAGTTACCAGTGACATCACGGCTGAGCAAATTCCTCAGGCG  
CAAGATCTAATCGCTGAGATGAAACAGTCAGAGGACATATATGAGTATTTCCGGTGCCTTG  
TCTGACGTTGAACAGAGATCCATCATTGTCAGCTGTAAAGGAAAATCCATATCTCATTGAG  
AACGAATCACCCCGTATGAGAGTCCAAAGTGAAACACCCGACGAGGAAACACCTGATAAG  
AAAAAGCCGAGCAAAACCTACAAGCTCTATATGAGCATTCTCGAAATGATGTCATGTATC  
AATCTTGTTGATGTTCCGTCATGTGCCCAAGCCCTTAAAGCGGCAAATATAGCTGAACGC  
GAGGCCAAGGCCCGTTACCCCGATTCCGGTCACTAATGGTAAAGGCGATGCCCTTCGTCAT  
TGTGCATGGAGCGCTCTCATGACTATTGCAATCGGAAAAAGATGCAGCCGAAAGAATTGGT  
AACGCTCATGAAACCGTTGTGAGAGGTGAACCCGAAGAAAGAGAAATGGATCTCATCAAT  
AACGCGCTGGGTAGAGACATCGGCGAAAGATTTCATCATCAATGGCGATGAAACGGGTGCG  
CTCAGTACTTGTGTATCCATGGCTAATATCGGGCTACTTCATACTCTGTTG

>RXN00256-downstream  
TAAACAAAGGAAGTTTCTATCAT

>RXN00264-upstream  
AAACCGGAAGGGCCCGTTTACTCCCTACTTGGCGCAGAAATCCACATCAATCCAGGTGA  
AGCAGTCATCTTTGATGTTGATCCACGTTTGAACACGGT

>RXN00264  
TTGCTTGTCGATTCCGGCGACGTCCAAC TAGAAGGCGTCACCGTCGAGCCCACCCAGCTG  
GCCTACACCGGCATCAATGAAACCCAACTCCGAATCCGTAACATCGGCACCACACCGGCG  
CGTACTGTACTGCTAGGTGGCGAACCATTTACCGAAGACATCGTGATGTGGTGGAACCTC  
ATTGGCCGCAGCCATGAAGAAATTGCCGAGTACCGTAAACAGTGGCAGGCCGAAGCTGAT  
CGTTTGGTATCACCCACGGATATATCAGCCACCACAAAGATGGGCTCACCAGGCTTCCA  
GCACCCGAGCTTCCCAACGCTGCTATCAAGGCACGTAAAAACCCAGCACCAACTGCACGA  
CCAGAAACGAGAATTGAT

>RXN00264-downstream  
TAAATGCGCTCCGCTCACGGCCC

>RXN00267-upstream  
GTCGTACTTATCTTTTAAAGTCATGCCTTAAAGGATACGGAGATCACTCCGGCTTGCGTT  
GGGTGGCGGTGTTATCAAAGTAGTCGTAGCGTTGAGAACT

>RXN00267  
ATGCGAAACTCTAAGTCTGGCCTGGCCTTTTCCGCAGCTGCACTATTTTGTGTCGTCGCG  
GTAATCACTCGTATTGCAAGTTCCCCATCATTTATCGCTATTGTGGCGATCATCGTGGCT  
GCGATCGCACTTTTTGTGGGTCTGAACAGTCGTGTGGGAACAAAGCTTGTTGATCAGCCA  
GTGGTGTTCACCCAGGAACAAATTGATCAATTGAAAGAGTTGAAATCCCGCGACCAGGAG  
GCGGCAGCGATCCGTCAGGCGCAGCTGTGGAGTAGGGGATCGTCCAGCGAAGCGGTGCGA  
GAGGCTGTGAGGAAGCTC

>RXN00267-downstream  
TAAGTCGACTTAAGTGCGCGAAG

>RXN00271-upstream  
TAGTTTAAATCATGAGACATTTACATATGGTTCCTTTATCCGAGACATGTGTTGACGCTG

TCTGCCCTTTTGAATAAACAACCTTTAAGGAGATGTGCC

>RXN00271

ATGTTTTCTTCCCGTTTCGAAGGTACTCGCAAGCATCTTTACTGTTGGCGCCTTGGCGTTG  
GCTTCGTGCTCAAGCGATTCCAGTGACAGCTCCACCTCCACTGATGCTGCAGGTGGCGAC  
TCTTACCGAGTTGGCATCAACCAGCTTGTTCAGCACCTTGCCTTGCAGCGACCACT  
GGTTTCAAGGAAGCTTTTGAAGAGGCAGGCGTTGACGTCACCTTTGATGAGCAAAACGCT  
AACGGCGAGCAGGGCACTGCACTGACTATTTCTCAGCAGTTTCGCTTCTGACAATTTGGAT  
CTCGTGTGGCTGTTGCAACTCCAGCAGCACAGGCAACTGCGCAGAATATCACTGATATC  
CCAGTCTGTTCACCGCAGTTACCGATGCAGTGTCCGCGAGAGCTGGTGGATTCTAATGAA  
GCACCTGGCGGAAACGTCACCGGTACTTCTGATATCGCACCGATTGAGCAGCAGTTGGAG  
CTTTTGCAGCAGCTGGTTCCTGACGCAAAAGTCCATCGGCATCGTCTACGCGTCTGGTGAG  
GTCAACTCTCAGGTGCAGGTCGATGAGGTACCAAGGCTGCTGAGCCACTGGGGCTGTCC  
GTTAATACTCAGACTGTCACTACCGTGAACGAGATTTCAGCAGGCTGTTGAAGCTCTCGGC  
GATGTTGATGTCACTACGTTCCAACGACAACATGGTTGTTTCCGGTATTTCTTCTCTG  
GTTGAGTTGCTGAGCAGAAGCAGATCCCTGTGATCGGCGCTGAGTCCGGCACTGTTGAG  
GGTGGCGCACTGGCAACCTGGGTATCGATTACACCGAGCTTGGCCGCCAGACTGGTGAG  
ATGGCTCTGCGTATTTCTGAGGACGGCGAAGACCCAGCAACCATGCCTGTGGAGACTGCA  
ACTGAGTTACCTACGTGATCAACGAAGATGCAGCAGAGCGCCAGGGCGTGGAGATCCCT  
CAAGAGATTTTGGATAAGGCCGAACGCGTA

>RXN00271-downstream

TGATCGGCGCTTTTGAGTTCGGA

>RXN00272-upstream

ACCGATGCACCAGCCACCAACGCGTCCAAATCAATATCAGCCTGGCCCACAAGGTGGAAT  
TCCAGTGGGTGGCCATCTGCCACAACCAGGTGCAGGGCAC

>RXN00272

ATGCCGGAACCAGAAACCTCCACGATGGGCTCCATCCAAAAGTCCGGTGAATGGCTCGTT  
CCTGCATATTCGGCATAACAAGCTCAACGGTGTGACCTTTTCTTAGATATCCGCCATGCC  
ACCGCGGCTGCTCCTGTGATTACCTTTGATGTCAACATGACCATGGGTTCTATGACGCTG  
ATTGTTCCACCGGGTGTGTATGTGAAGTGCAGATGGCTTCCAAGAACTGGTTCGGATTTT  
AAGGTTCAAACAACCAATCCTCTCCCCGGTGTCCCCGAGTGTTCATCACTGGTGTGCA  
CGCGCATCAGGGTTGAAGGTTTTACCAAGCATCCTCATGAGCCTTTTGGGTTCTGGCAG  
AAAATGTTTGAG

>RXN00272-downstream

TAGCCTCGGGCCACGCCCCAACC

RXN00283-upstream

GCGTTGGCATTTGGCGTTTTTAGCGCGCTATGACGCCCTCATCATGGCCTTCGTAGCCATG  
TGGACTGTTCGGATTTATGACATGGCGCGCACGATAACCGC

>RXN00283

GTGGCTTCCGCGACCGCATCGGATTTCGCACTTGTGACATGCTGCTCCTCGTCTGGCCGA  
TCGGCTTCGCCCTTCGTGCGCTGGACTGGCGCCAAGCTGGCTCACTACCGGCGAACTCTTT  
GCCCAATTACCTCCACAGACGGCAACGCTGCGATCATCGCAGCATCCGGCGGCGGCGCC  
ATAGGGCCCCAAGCGCTTTTCGACGCTTCCGTCCGCACCTTCTCATCTCCCCAGCTCTC  
CTACTCGTCGCACTAGTTGCAGTCTTTTTTGTCTTATCGACGCGCGACCCCGAACCATC  
ATCCCCCTTAGCTCTCATCGGCTCTGTGGTGTCTTCCAAATCATTACCTACTCACTTGA  
TCTACCTTCGGCTGCTGCGCTTTTTCTCACCAGCCCTGCGGCTCACCATTATCTTGCTG  
TTCCAAATTATCCCCGCCCCGCCACCGATTCCCCCTCACTGCGACCAGGTGCGTGCTACCGC  
GATCGCGTCACCGGCAAGTACGTGCCCCAAAACAATCACCAGGTGTTTTAGTTCTCGCGATC  
TTCCGGCGGCACCGGCATCACCCTGTACGGCATGAGCAGTGTAACTGGGCGCCCCAGGAA  
TATGCCATCCAAAGAACTAGTTTTCAACATGGGATCGCCATCGCAGGACGCGCTCCACACC  
CTGAACACCTTCTCCACTGAAATGGATGTGCGCGATTTCGTGCACTCCCTAAACCTTGA  
GACGGCGAAGTCTTCTCTCCACCACCTACGGCTTCGCCGTCCTCACCAGCATCAAACAAC  
CAAAAGCAATTCTCTCCCTCCGACGAAGACTTCATCACCACCTCAACGAACCCGCT  
GAGCAGGCGGTTAAGTACATCTCGCCCTCCACGCGAAGGTGCGGGCGCCACCGACCCG  
ATCAACCTGCGCTACCCAGACATGTATGAAACCGGCAGCCACATCGCCACGATGGAAATC

GAATTCATCAATCAAGGCCAAGGACAACCAAATTGGCGCCTCTATCGGGTGCTCACCACA  
CCTGAACAGTCG

>RXN00283-downstream  
TAGACTCTTTGTAACTACCGTTG

>RXN00334-upstream  
ATAAGCCCCGCATGGGATATGAGAAAAGGAATGCACGATGAGTATTGAATTTCCGTTAGG  
TAATCCAGCGCCTGCACAGTGGTTTTCTGGCGAGGTCCAT

>RXN00334  
ATGGCCAAGCTTGATGACAACGTGCAGATTGAGACTGTGAACGTGTCTTTTGAGGCAGGC  
GGTCGCACCAATTGGCACACTCACCCAGTCGGTCAAAACATAATTGTGCTGTCTGGGCTTG  
GGCATTATGAGGCGGAGGGGGAGCCTGCTCGACTCCTGGAGCCTGGCGATGTTGTTTTTC  
GCAGCCGCCGGGGTTCCGCACTGGCACGGCGCCGTGTCTGGTGCACCGATGTTCCACGTG  
GTGGTTAACCCTCAAAGGCATCGACGGCGAGACCGTCGATTGGGAGGAGCCGGTCGACGAG  
GAGCACTACCGCAGCGTGAGCGCGGAGCTACAAAGA

>RXN00334-downstream  
TAAAAATGCTTTTCGACGTCCAC

>RXN00338-upstream  
TCTTAGAAGGCGTAGTCACACCATTAACTTTGCCAGAAATTTTCAAGGCTTGGCTAGACT  
TGGGAAACGAACATGCGGTACCAACCAGGGGAGTTAATGC

>RXN00338  
GTGAGTGATGTAACCGTTGGCGATATTCCGCCGATTTTGGATGAGGCTTATCCGCCGGCG  
TTGGCGGAAAGCTGGGACAAAGTGGGGCTGATCTGCGGTGATCCAACAGAGTCGGTGAAG  
CGTGTCGGTTTAGCACTCGATTGCACCCAGGCAGTGGCCGACAAGGCTGTGGACATGGGT  
TTGGACATGCTGATCATTCACCACCCATTGCTGCTGCGTGGGGTGACGTCTGTTGCTGCG  
GATGAGCCAAAAGGCAAGGTCATTACACCCCTAATTCGCGGCGGGGTGGCACTGTTTTCC  
GCGCACACTAATGCGGATTCCGCGCGCCAGGTGTCAACGATAAACTCGCCGAGCTCGTC  
GGCATCACGCGCGGGCGACCCATCGCGACACCGCTTTTAGGCGGCATGGACAAATGGGGC  
GTGCACGTTCTGCCCAAGGATGCAGCGTACCTAAAGAAGATGCTTTTCGACGCAGGTGCC  
GGTGCATCGGCGACTACCGAGAGTGTGCCTTTGAGATCGAAGGAACCGGGCAGTTTAGG  
CCCGTGGAGGGGGCGAATCCGGCAGAGGGGGACGTCGATAAGCTTTTTTAAATCCCTTGAG  
CTGCGCATCGAGTTTGTGTCACCGCGCAACCTGCGCGCCCGGCTCACGTCGGTGCTGCGG  
GAGGCTCATCCGTATGAGGAGCCTGCCTTCGATATTGTTGAAATGCACAGCGCTGAGAGT  
TTAGAAAATGCGACCGGATTGGGTCTGTGGGTGAATTGCCGGAGCCGATGCGCCTCGCG  
GATTTCTGTCAACAAGTGGCCAAACAACCTGCCTGTCACCGAATGGGGCGTGCGCGCTACC  
GGCGATCCTGTAACAAATGGGTGTCCTGTTGGCGGTTTCATCAGGGTCGGGTGACAGTTTC  
TTAAACGATGTGATTAAAGCTCGGAGTGGACGTTTATGTCACCTCTGATCTGCGCCACCAT  
CCAGTTGATGAATATCTCCGAGAAGGTGGCCCTGCAGTAATCGATACTGCACACTGGGCC  
AGCGAATTTCCATGGACTTCCCAAGCCCAAGAAATTTTGCAGGACAAAGCCCCACAGGTT  
GAAGTTGATGTGATTTCGATCCGCACAGACCCCTGGACCATGCTCTGCGCGAGCAGTGAAC

>RXN00338-downstream  
TAAATTCCTTGAGAACTAAAAAAG

>RXN00342-upstream  
CGGTAATGTGCAATTCCGATATATCAATAGCCCCGCGTTTCATGTTGAATCCATGTAAT  
CGAAAAACACATCGGGGCCACACGAGGAGGATTATTAAA

>RXN00342  
GTGGCCGACGCTCCGGGCGCAGTCAAGCAAGGTGCCCAGGATTATGCTCAACTACTCGGC  
ATTCAATCGGGTCATATCGTTCAAGAAATTGGATGGGATGAAGATTCCGACACGCTGATC  
AGCGAGTCCATCGAAGATGCAATCGGTGAGGAACACTCGATGAAGAAACCGACGAGCTG  
TGCGATGTCGTGCTGCTCTGGTGGCGCGAGGATGACGGCGATCTCGTCGACGGACTTGTG  
GATTCCATCCGCTCCCTCGCTGAGAATGGTCGTATCTGGGTGTTGACTCCTGGCATTTGGT  
AAAGAAGGAGCCCTGGCTCCTGGAGTTATCTCTGAATCAGCTCAACTGGCAGGTCTCGTG  
CAGACCAAGGCAGAACGTCTCGGTAATTGGCAAGGTTCTTGCTCGTCCAGCGTGAAAC

AAGAAGCCT

>RXN00342-downstream  
TAACAATCGCTAATTTCCACGGC

>RXN00344-upstream  
CGGCACGGTTGGCGATGTCATGCAGTCCGAAAACTCAGCGAACTCTACAACGCACCCGT  
CACGGTGGCTCGCATCAACGACAGAATCGTGGTGGTTTAA

>RXN00344  
GTGGATCTATCCACCTGGCTTTCCGACACCCAATATCTCATCAGCGTCGATTTTCGTCCAG  
CACGCACTCATCGCCTCCGCGCTGTTGGGCCTGCTCTCCGGTGTGATCGCGCCGCTCATC  
GTGGTGCGCCAACAGTCCCTTCGCAGTCCACGGCACCGCCGAACCTCGCCCTCATGGGAGCC  
GCCGCCGCGCTGCTCTTCGGATTGAATGTAGGCGGCGGTGCAGTGATCGGTTCCGTGGTC  
GCCGCGATCCTACTGGCATTAACCTCGGCATGAAACAACAAGATTCCGCGCTCGGTGCCGTG  
ATGAGTTTCGGACTCGGTCTGTCCGTGCTGTTTCAATTCACCTCTACCCCGGCCGAAGCTCC  
ACCGCGTTCTCCCTGCTCACAGGGCAAATCGTTGGTGTTCCTCATCATCGCTGTGGATC  
CTTGTGGCAGTCAACGTGATCGTGGTTAGCGCCGTGGTGATTTTCTGGCGCCCGCTGCTT  
TTCGCCAGCGCCGATCCGATCATGGCGCAGGCCTCCGGAGTAAACGTCCGATTCATCGCC  
GTTGCCTTCGCAGTTCTGGTTGGCCTCACACGTCCCGAGTCCGTGCAGATTGTCCGGTGC  
CTGCTGGTCATGGCATTGCTGATCACTCCCGCGCGCGCCGCTGTGGCGGTGACCGCCAAT  
CCAGTGAAAGCCGTGGTGTGTCAGTCACTTCGCGGAAGTATCGGCTGTCCGTGGCCTG  
CTATTGTGCTAGCGCCTGGTTTGCCGGTGAGTGTTTTGTACCAACCATCTCTTTTGTG  
ATTTACCTGGTCTGCCGCCGTGATCGGTTGGCTCCCGGCCGTGGAGCTCAGCGTGACGAA  
GATGCTTATCGACGCCGCCAGCACGATCACCAACCTCAC

>RXN00344-downstream  
TAGGCGTTTCGAAGTCCTATTTT

>RXN00353-upstream  
CTTTCATCAGGACCGAAAGCGAACGTTTCGTATTGTTGAGCCTTTTGGTTCCACCACGGA  
TGCGCTGATCTATTTTCATGGCTCCCAGCAGTCAGGATCT

>RXN00353  
GTGGGGCGCAGCTTCACCAACAGGACTTTTGATCCGTTGCCGTTTCATGGTGGTTTATCCG  
GATGGGGTGGATCAGCATTGGAATGATGCGCGGTTGGGTTTGGATGAAAATACCCGCCAT  
TTAGGCATTGATGATGTGGGGTTCTTTGTAAAACTCGCCACGCACTTGGGCAACACGTAT  
GGCATCAAGAGGATCTTTATTGTTGGCTATTCCAACGGTGGGCAGATGGTGTTCGGGCTC  
ATGATGAGGTTCCTCAAGATGCTCAGTGGCGCTGCAACCATTCATCCAACATGCCAGTT  
GCAGAGAATACGCTGCCGAGGTGAAAACCTTCAAGACACATCCGGTGCCTTATTTGGCG  
ATGGCTGGAACGCGGATACTTTTTACCGTATGAGGGTGGCGATGCCGGTATTGGTCCG  
GAACACCGCCGTGGCGTGGGCATGTCCGCCTTTGATTACGCTGCCTATATTGCCGCCCGA  
AACGGACTGACCGAACACCGCCACGACGTGATTGATGATGTGGTGTGATCGATACCTGG  
GATGGAGAAAAATCCCGTTGAGTTTTGGACACTCAACGGGATCGGCCACTTGGTACCAAGT  
GGGAAAACTTATCCAGAATTTCTAGGCCCCCTCAACCACATCAGTGATAGCGGCTGAGGAG  
ATTGGGAAGTTCTTTGATGGGGTCAGGCGTCTCA

>RXN00353-downstream  
TAAGCTCAAGCTTTAAAAACGCA

>RXN00354-upstream  
GGCTTGTCGGTAAGGCTGCAGGGTAGCGGGAGTTTCCTTCAGATTGGAAGTTCTTTAATT  
TTCTCGATTATGTACCTCATTTACGCGTAAAGTTTGGGGC

>RXN00354  
ATGGGAAAGTTACTTTTCGTAGACATCGGTGGCACACTGCTGGATTACTCAAATGAAGTT  
CCGCGTTCCGCCGTTGACGCGATCCGTAAGGCACGCGCCAAAGGACACCGCGTGACTTG  
AGCTCTGGTTCGAAGCAGCGCTGAGGTGACTTCTCAGTTGTGGGATATCGGAGTGGATGGC  
CTCATTTGGCGCAAATGGTGGATATGTGGAAAGCGCACAGGAGTCTGTGTTCCACCGCCGT

TTGTCGGGTGAGGAGACCCGCCACATTGTGGAGTGGCTCTACAACCGTGGTTTGGAGTTT  
TATCTCGAGTCCAACAACGGTTTGTATGCAAGCCGTGGTTTCCGTGAGGCTTCTAAGCCA  
GTGCTGTCTCGCCTTTCGGAGAAGACCGACGTGACAGTCGATAGCATGTACCCGGATATG  
TTCTGGGGCGCGAGCCTTGATCGTGACGATGTGAACAAGATCAGTTACATCTTCAATTCT  
CAGGAAGATTTGGACGCAGCGCGTGAGGCGTTCCTTAACCTGGAGCACACCACGTGGGGT  
GGTCAGACGGGTGCGTTGTTTCGGCACGATCGGTGTGTCTGTCAACAAGAAGATCGGCGTG  
GATCGCCTGCTGAAGTACCTGAACGCAGATCGCGCAAACACCATTTGCGTTTCGGCGACAGC  
GATGAGGATCTCTCCCTATTTGAGGCGAGCGCTTACGGCGTCGCGATGGGCGAGGCCACC  
GAATCGCTCAAGGCTGCTGCTGACCTGGTCACGGATGCTGTTGGGCAGGACGGCTTGCGC  
AATGCGTTTTTTAAAGCTTGAGCTTATCGACGCC

>RXN00354-downstream  
TGACCCCATCAAAAGAACTTCCCA

>RXN00362-upstream  
CACTTTTTGGGTGAAAAATCCACGAAGTTAATGCCGCTTTAAGTCAATTCAATCACATGT  
AACATGCTACGGTTTTTTTCGGTCACTTAAAGGAGGCGCTT

>RXN00362  
ATGGGAATCATTGCTCTGCTCGTTTTTATCGCAATTGCCGTGATATTGAATGTGTTTTG  
AAACGAGATATTTCAAGAAGCATTTGCTAGTTGGATTAGTAGGAAGTGCCTTGTTCGGCGGT  
GTAAATGCACCGACATTACTGATTGATGCTGTAGTGGATGCTGCTCAGTCGGAAGTTACT  
TTCGACAGGTATGGCCTTTGTTTTTCATGGGCATCGTTGTGCAATCAACTGGATTGATTGAT  
CGATTAATCGCAATCCTTAACCTCGATTTTTTGGTCGGCTTCGAGGTGGCGCAGGTTATGTT  
TCCACTCTTGATCTGCGCTCATTTGACTCATCGCTGGATCAACGGCTGGAAACTCCGCG  
ACGGTTGGCTCAGTGACGATCCCTTGATGAAAAAGACGGGATGGACTGCTGAAAGGTCC  
GCAACGTTAGTCGCGGGCAACTCTGGCCTTGGTGTGCGTTGCCCTCCCAATTCAACAATG  
TTCATCATTTTTGGCATTTGCCAGCTGCAGCAGCTTCTTCGGCCTCTCAGGTGTACATTGCT  
TTGGCTTGTGGTGGTGGTATGCAGTGCTCTACCGCTTAGCGGTGCTCTTTTACTGGACA  
CGTAAAGATAAAATTCCTGCCACCCCTGATGATCAACGGGTGTCATTCCGTGAGGCAATG  
AAGACTGGATGGCGTTACCGTTGATCTTCCCTTGAATTTTGATCCCCGTAATCCTCACA  
ATCGGCCCCATTGCTGTAATGGTTAAAGACACATGGAGTTGGGGAGTCTGGTGTAAATCG  
ATGTCGATCATCGTGTGGGTGCCAATTCTGATTACGGCAATTGCTCTGATTGAAGGGCGT  
AAACGAATTGCTAACAACATGGCACACTTTAGGGTTCAGATCTCCAAGGACTTGCCACAA  
TTTGCCACCGTAGGAATTTCTGTTGTTTTCTGCGCTTGCAGCAGCGAACATCATGGAAGAA  
CTGGGTGTTGGCCCGCAGTTGTCTAAGTGGCTTGATTCCATGGACCTACCTAAGTCTGTC  
ATGGTGATCATTTGCTGTCATCATGTGCATTGTGGTGGCAACGCCACTGTCGTCAACAGCA  
ACCGCGGCTGCGATTGGTGCTCCCGCTGTGCTGCGTTGGCTGCGGTAGGTATTGATCCA  
ACTGTGGCGATCGTAGTATCTTGCTGTGCATCTCCACTGAAGGTGCATCCCCGCCGGTG  
GGCGGCCGATTTACCTTTCTGCTGCGATCGCCGATGCAAACCCAACGAAAATGTTTCGTA  
CCACTGATTACGTACTTTGTTGTCCCCATGATTCTGCTTGCTTGGCTAGTTGGAATGGGA  
TTCTTACCAGTGATTGTTCCCTACGGGT

>RXN00362-downstream  
TAAAGGGGTAAAAATGAACTCAA

>RXN00373-upstream  
CACGTGGCGGATCTGCGCGCTAAGGGCGAGCTGCCGCCGCCGAGGAAGAAACGCAGGCGT  
CGAAAAGCGTCTTAAAGGTTTTTCACTAGGGTGTGTCC

>RXN00373  
ATGGACATCCAGCAGCTAGACGCCGAAACAACAGCATGGAAAGACAGCCTCCTGCGCGCC  
GCACAGGAGGCTGGTTTTTCATTTTGAGCCACCGAAACTCTTCGAGGATTTTGAGACCATG  
GTGGAGCAGTACAAGCAGGCAGCTGCGAGCGACCCGGACATTGATGTCACTGATATTTCAG  
CAAATGTGGGGCATCGTGGTGGGGGAGTACCTGCGCGAAAAAATGGGCATGGAATGGGTC  
GTCATCACCGATGACTACGGCACTGACCTCGCGATTCTAGCCACGGCACCCAACGGGGAC  
CACGTATATTCCTGCCCCATCATCGTGGTGGGCAAGCGC

>RXN00390-upstream  
GGAAATAGACCGTTAATAGCTGGTCTTTACATTTGCCAGAAAGCTCCGACGAAACCCCAA

TAGTTGACACGGAACTAATTCATTCTAGCTTTAGTGACC

>RXN00390

ATGTCAACTACCAGGGAATTCATTCCTCATCGCACGTATCCTCTTGGGCGTCATCCTC  
ATCGCCACGGCTGGGACAAGTTCGCCATCACAGGACTTGAAGGCGTCACCGGCTTCTTC  
GATTCACCTCGGCATCCCAGCAGCCGGCATCGCCGCAATAGCTGCTGCAGTCGTCGAGCTC  
CTAGGAGGAATCCTTATCATCTTAGGAGTATTTACCCGCATCGTTGCCGCCTTCGTTGCC  
ATAGACATGCTCTTCGCAGCACTGTTTGCGCACGTCTCCTCCGGCATCTTTGTCAACCAAC  
AATGGTTGGGAATCACCGGCGCAATCGGCGCTGGCGCGCTGCTTCTCATCGCAGTTGGC  
GCAAGTGCATGGAGCATCGACGGGGTTCTGGCAAAACGCAAGGCC

>RXN00390-downstream

TAAATCTAGCGCCACAACCTCCGA

>RXN00399-upstream

GGACATTGCTATGTCGTGAGTTGTAGTAACCCCAAAGCCACGGATTAATCAATAGTGAA  
ATTCAATGATTTTCTTTTCCACAGGCCTAAACTTAAATC

>RXN00399

ATGAGCCACAACGACAGCCCAAACCTTTGCTCGCCGAGCGCTCAATTGGCTCCGCCAAGGT  
TATCCAACCGGTGTTCCGCGGCACGATACCTTTCGCTCTGTTTTACGTTTTGGAGCGCGAA  
CTTACTGAGGAAGATCTCAATGAGCTCGCAGAGCTTCTCATCGCGGAAGGTGAGAACAAT  
GGGCTGCACGATAATCCCATTTACGCGTGAAAAATCGGCAAGCTGATCACGCATGTTTAC  
AGTCAGCCACCTGAGGATGAAGACATCGATCGAATTCAGAAAAAGCTGCAGGCTGAGGGC  
TTCCCCACCCGCAAT

>RXN00399-downstream

TAATTAATTGGAGTTTTGTTGTT

>RXN00416

CTGGCGTCTTACTTAAGCCCAACTGCGCTGGTGGTTGCGGTGTTGGCTATTCCGCTGTCT  
GCGACCCGCGTGTATTGGACGGAATCAGCGTTGACCAGGGCTTTAGAACTCAGTTTTTA  
ACCCGCATGGCTGACGATATCGGCTTGTCGGACATGAACATACATCGATATGCCTACCTTC  
TACCCTGCTGGATGGTTCTGGCTCGGTGGTTCGCTTGCCCAATCTTTTGGGGCTGCCCGGT  
TGGGAAGCTTTCCAGCCATGGGCAATTGTGTCCATGGCAGTTGCTGCTTCTGTGTTAGTT  
CCAGTGTGGCAGCGCATACCGGTTCCCTGCCGGTGGCAACAGGCATTGCGTTGGTGACA  
ACCTGCATTATCTTGGCGATGAATTCCGAAGAGCCCTACGCTGCAATCGTTGCGATGGGT  
ATTCCAGCGATGCTCGTGCTGGCTTCCCGCATTGCCAAGGGCGATAAGTTTGGCGTTGCC  
GGCGGCATTATTTACTTGGGTGTTTTCGGCTACTTTCTATACCTTTGTTACCGGTGCTATC  
GCGCTTCTGCGGTGCGGTGTGCATCGTGGTGGCGGCTATTGTGCAGCGCTCCATCAAA  
CCACTGCTGTGGCTTGCAGTGTGGGTGGTGGATCCATTGTCATTGCGTTGATTTCTTGG  
GGTCTTACCTTCTGGCCTCCATCAACGGAGCGGAGCGCTCTGGCGATTCCGCAACACAC  
TACCTGCCCTCTTGAAGGCACCCAATTCCCGGTTCCTTTCTTGGCATCAAGCGTTGTGGGA  
CTGTTGTGTCTTGTGGCCTGATCTATTTGGTGGTGGCTTCCACAACAATGAGGTGCGC  
GCGATGTGGGTGGGCATCGCAGTGTTTTATGCCTGGATGGGCATGTCCATGGCGATCACG  
CTTTTGGGCAACACGTTGCTTGGATTCCGCTTTGATACGGTGCTGGTGCTTATTTTGGC  
ACGGCTGGAGTGTGGGCATTGCAGATTTCCGCTTGCCAGTGTGTATCAGCTCTACCCC  
ACCCAAATCACAGAGCGCACGGCCACCCATCTGACCAATCTAATTGTGGTCCCTCGTGCTG  
CTTGGCGGCCTCTACTACGCGCAAGATCTGCCGCGAGAAGACGCACGAGCTATCGATCTG  
GCCTATACCGATACATGATGGCTACGGCGAGCGCGGATCTGTATCCGGCCGGAGCTGCA  
CGTTATTACAAGGACATCAACGATCATCTGCTTGATCAAGGATTTCGAGCCTTCCGAAACT  
GTCGTGCTGACAGACGAATCGATTTTCATGTCCTACTACCCTTATCGCGGATACCAAGCT  
TTTACTTCCCACTACGCCAACCCGCTTGGTGAGTTCGGAACAGGAACGCATTCATCGAA  
GATCTCGCGATCCGAAGCTGGGATGAGTTGGCTGATCCTCAACAATTCAGCGACGCTTG  
AACACCTCTCCATGGACGATCCCTGAGGTGTTTATCTTCCGTGGCTCCATCGATGATCCT  
GACGCCGGTTGGAAATACGACGTGGCTGAAGATCTGTACCCGAACAATCCAAACGTGCGC  
TTCCGCGGCGTGTACTTTAACCCGGAGTCATTTGATCAGATGTGGCAGACCAAGCAAGTG  
GGACCTTTCGTGGTGGTAACGCACAATGAG

>RXN00416-downstream

TAATTCCTCACCAAACGACCCAA



>RXN00422-upstream

AAGCGCCGGGCGCGGAAGGCGCTGGCTGAGGCCTTCGGCGCGGAGGTCCAGCCACTGCCG  
CTTGACACCGAATAGGACAAATGGGTCTATCCTGGGGCGC

>RXN00422

ATGCCCCACGAATTATGCACGCGACAACGTCATTTCCCTTGGCGTCTGCCCCGCGAGCAGCGT  
TCCGGGAAAACCCGAGCCCAAACCCGAACCTAACAATCATCGTCCGCGCCACCAACGTGCAA  
GCGGACGGCGAGGTCCACAGGCAAATTGGGTTGAACTCGGCGATGAGCCTGGACGAGCTG  
CACAATGTACTCAACATCGTTTTTCGGTGTGGCGGCGAGCAGTCACCCCTGGCGTTTCGAA  
GACCAATTCCACCAACCCAGCGCCCCGACACCAACCTCGGCGAACTCCTGCCCCGAACCC  
GGCGACTTCCTGTTTTACTTCTGGGGCCTGTGGCAATTCAACCTGCAATGCGTGGAAATG  
TACCCGCGCGACAACGGCACCCCGCGCGCGCTGTGCATCGGCGGCTCCGGCGGCTTCGGC  
GACGACTTCGACCAAGCCACCATCAACGCCGAACCTACCGGCACCGACACCATCCGCGAC  
GTCTCTCCGGCGTGCGCCCGAAGTCATCGACCTCGTCGACCGCACCGGCGTCTTCGAC  
TTCATCCCACTGCTCCAAGCGCTCGACCTCAAAAGAGAACCCTTATCGACGCCACCCGC  
TACCACACCTGCCGCACGTGCCAGTGGAAAACAGCGCCGAAGCCTCCGACGCATTCTGG  
TCCTGCGTACTCGCCCTGTCTGCTCGGAAACGACGAACTTTTCATCGAAGTGATCGAA  
TCCACAATGAGCACCTTCGGCTGGGTGCGCGACGACGGCTCCCCACTACGTGCACAGAG  
ATCACCAGCGCTGCGAAGCCTCCCTGAAGATACTCGCGGAACCTCGGTGGCTACGGCCCA  
GAGCGGCTTGCCCCCGTGGATCGCCTGGACATTTATAGGGAGCTGCTGTGTTTC

>RXN00422-downstream

TAGGTATTGTGTAACCTCGTGTC

>RXN00447-upstream

GAGCACGGCATCGTGATTTCGCGCGTTCCCCGAGGGTGCGCGCATTTCCGTGACCAACGCC  
GAGGAACTGACAAGCTGCTGCGCGCGTGGGAGGCCATCA

>RXN00447

ATGCTGGGTAGTCTTTGGCGTTTTTGCGGTGCGCACCGCAGCAGGCGCGGTGGCGTTGTGG  
GTGGTTATTAAGCTTATCGACGGCATCTCCCTGAGTTTTCCACCACACCTCTCTATCAG  
GACGGTCAGCACGACAATCTGCTGACATTCTGGCGGTGGCAGCAATCATTGTCGTGTTG  
AATGCCACGGTGAAACCCGTCTTGAAGCTGCTTGGTTTGCCGTTGACAATCATCACCTTG  
GGTCTGTTCTCGTGGTCATCAACGCGGTAATCATGCTGCTGGCGGAGTATGTGTCAGAT  
TTGATCGGTTTTCGGTCTACGCATTGAAACCTTCGGTGCGGCCCTTCTGGGGTGCGATTGTG  
CTGGCGTTAGTGAACCTGGGTTCTTGGCCCCATTACCGGCCTCCTCGGTGCAAAAAGGAC

>RXN00447-downstream

TAACCATGGCGGATCTGAGCATT

RXN00455-upstream

GAAGTGCTGGCCGATTGGCTAACAATCTCTAGTTAAATCCCGCCTCATGAAACCACGAT  
GAAACCAACATGAGAGTTTTTTCATCCACGTTTTCTGGCT

>RXN00455

ATGGTTGTGGACGTGCAAAATCAATCACACACCCAGAAACCCAGCCTCAACCTGGGCAG  
GGCGCAGCCAAGAAAACCCCGTTGCGTCCGGAACTCCACGTTCAATTCACATTACGCCA  
AGCTTGTAACCCATTTTGCTGGCGCTGTTTGTGTCAGTCTTTCTAATTTCAAATATCACC  
GCAACCAAGGGCGTAGAAATCGGCCCGTTGGTGACAGACGGTGCGTTCTTCTCTTCCCC  
ATCTCATATGTGTTGGGCGATGTTCTAGCCGAATGTTACGGCTTCAAATCCACTCGTCGT  
GCCATTCTTACTGGTTTTTGGCATCACGATGCTCGCGGCGCTGTCTTTCTACATTTCCATC  
TGGCTGCCTGGCGCAAGTTTTCTGGGAAGGCCAAGAAGCTTTCGAAGCAACGCTCGGCCTT  
GTTCCACAGATCATCGTGGCATCACTGGCGGGCTATATTGTGGGTGAGCTGCTCAACGCC  
AAAGTTCGGTGGCTATCAAAAAGCGCACGGGTGAAAAGTCCCTGTGGGCGCGCCTGATT  
GGTTCACCGTTGTGCGAGAATTTGTGATACCCCTGCTGTTTTGCGCCATCGCAGCGCCA  
GTGATCGGTATTGCCACCGCCCCGATTTCATCAACTACGTTGTGGTGGGCTTCGTGTGG  
AAAACCTTCTAGAGGTATCCTCATGCCATCACCTACGCAGTCATTAGGTGGGTGAAA  
CGCCGCGAAGGTTATGAAACCTTCGACGCG

>RXN00455-downstream  
TAGTACCGGCCTAAGAATTCTTC

>RXN00473-upstream  
GGGGCAGCTGTGGATTTTTACACAACCACCCCTTTTCTCACACCAGCCCCGCATGAACAGG  
CTGGTTGCACACCGTTGAAAATGAGTGTCTTACTGGAACTC

>RXN00473  
ATGAGTGGAAACAGGTGTTTCGAAAGTTGTGGGGAGATGGCACTCCGGTGTGCTCCCTGAC  
CTTTCAGGATTAAGTAGAGCGGAGCGCATTGATGCGTTGCGTTCACGCATGTCCACCATG  
GGTGTGCGGTGCCAAAGTTTGAGCCGTCCGGTGGAAAGAAAGTGCTGAACAAAAGCAGGAT  
TCTCTCGCCGAAAAACAGGACATAGTTGCAGTTCCTTCCGCTTTTTCTGATCTTTTCCCT  
GGGGATGGTTTGC CGCGTCTGTGCGGTTACTCAATTGGTTGAACAGCCACTTGTGGTGGTG  
GACTTCTTGCTCATATTACTGCCCAGGGTGGACACGCTGCGGTGATTGGGTGGAAGGAT  
TTAGCCTACGCCGGGGTGATTGATTCCGGAGGTGTGTGCGAGAACATCATTGCTATTCCA  
AATCCTGGTACGGAGCCACTGAATGTGGCAGCGGTGCTGTGTGAGGGGTGGATGTGGTC  
GTGTACAAAAGGCCCGGAGATTTCCCTGTGCGCAACCAGAGCGAGGCCGTTGCTGGGAAAG  
CTGAGGCAGGGGACTGCTGCCTTGGTGATGGTTGGCACGAAAGTAAGCTCACCGGCGCTG  
TCGGTGGATGCAGAGATCACTGATTATGTTGGCATTGGTGCAGGTAGTGGGCGTATTCTG  
GGCGTTGAGATGCAGGTGCGGGCTGTGTGCGAAACTCACGGTGTGCGCAGCGGAAAAGTC  
CTGATCAGTAGGCCCTCAGGATGCAGCATTGCTTGAGCCTGAACAGCCAACAACGTTGCGG  
GCGGTCCCA

>RXN00473-downstream  
TGACGCGGGTGATGGCATTGTGG

RXN00485-upstream  
TCAACTTCGGCGACGAGGTGGGCGCTATTTTTCATTGTTTTCGCGATTTTCGCTTCGGT  
TGCATTGACTGTTAGCGCCACTGCGTTGACAAATTCTTTG

>RXN00485  
GTGTCCAGTGTTAATGATCTTTTTGCCAAGCCGATGAAAACGCTGATCTTGTGGTCACG  
GTGTCTGCGAAAAACGAAGATTCCCTTTGAGCAACAATTAGCTACGACACCT  
GGTGTGGAAGCTCTGGCTTTTGATCAAAATTTTGACGCTCTGTAAAGCAATCAGACGGG  
ATTTACGCCAGTACTTCAGTCCAGTCAATTTGCGAAGGCCCACTGCAGTGGCGGCCAATC  
CTAGAAGGCCGATTGCCCAAGGACCTGGTGAGATTGCAGTAACAACGGCCCCGGGTGCG  
CCTGAAGTTGGTGAGCACGTATCCATTGCGCTGTCCCAAAACACTGAGGACACTGAGGTT  
CTTGTGGTTGGCGTGGTGAGCCAGCGGCGCAGGAACTTTAGGTGGCGCACCGTTTCGTT  
GTGGCGTCTCCTGATGCGCTGATGGAGTGGAATCTTCCGGTGTGCGGGGTGAATTCCGA  
GTGGCAACTTCCGATCTGCTCGCTAGAGGCTGCAAGCTTTAGCGACGCTACGGTGGTG  
GTTGCTTCCGGCGAGGGGACGTCGATAAGCTTGCTGATTCTTATTTGGGCCAGCGAGAT  
CGCTATTTCTTGCTGCTCGCAGCGTTTGTGGCAGTGGCTGCTGCCGTGGCGTTTTTGGTG  
GTCTTTTCTGCATATTCGGTGCTCACTGGTGAGCGAGTTCGCGAGTTCGGGCTGATTCTG  
TCAGTGGGCGCATCGACGCCGAGATTTTGGGGTCAGTGATTTTGAAGCCGGCATCCTC  
GGTGTGGTGGCTGCTGGTTTTTGGTGCGCCCCGCCGATTGATGGCGGCGCGTTTGTGGCG  
GATAATGCCGCACGTTTTTGGCATTCTGTGCCCCATTGATGTGATTGATCTGCCAAGTAGC  
ACGATGTGGCTCATCGCTGGCGTGGCGTGGTGATGTCCGTGATTGCGGCATTACCGGCA  
GTGTTCAAGTGTGTGCAGAAAATCCGCAGTGGAATCACTGAGTACGCCTGCTATTTTCGAGG  
ACTTCCCCCTGGTTCCGTGCATTATGGTTGCTGCTCGCGGGCATTGTGGGCGCCGGCGGA  
ATGTGGGCGTATGAGGCAACCTCGGACTACCGCGCATGCGTTTCAAGTGGCTTTATCCATC  
GCCGTTTCAAGGCGCTTTGGTGTGTGCGTTGTTGATTGCCACGGCGGTGCTCGTGCCCTGG  
TTATTGCACGTATTTCTCCAGGATTGTGGGCGGCACCGTCCCAACACTTCAGTTGGGATTG  
GCGTTTGCAGCAAAGCAGAAATCTCGTTCCGGCGCGCTGATCGCTGTGATTCTTGCTGGT  
TCTGCATTAAGCTCCGCTGTTCTGCATGGCCAGGCACATATCGGCACGCATTTGGTGGCC  
GTGGCTAAAGGCATGGGCGGCACAGACATGATGGTTACAGCGCTTGATGGGGAAATCCCC  
GCCGGAATGCTGGAGGAAATCTCTAGCATCGACGGCGTGAAAACCTGCCATCGCGCCAGCC  
ACCACCGCTGTGGAATTGGAAGATTCCGGCAATTTCTCTGTGCTCATGCTCGCTGAAGAA  
GACGGAGCCTCCGTGATGCGCGCAGGCGATACTGGTGCACCAGCTGGTGGCCTTGTTTTG  
GGCAGAAACTCTCCTGACCAGGATGCTTACCGCGCCGGCCAGGCTGCAACATCATTTGTC  
GCGGATACCCCAACGCAGGCGGAAATCTTCCACAGCGACAACACTTCTCCATGATCGAC

CCAGCACTCGCCACCGGCCCCAGCACCACACGCAACGTACTGATCCTGCTCGACGGCGAC  
TCCAACCAGGCCCCCGACAACGCCACGGCGCAGGCGGTACGCAAGACCATTTTCGCTTTTC  
GACGGACGATACTCCATCACCAGGGTTTCTCCGCCCCGCAAAACACTTTTGAAC TGTT  
TCCCGCATCACCACCATGTCCACACTGCTTGCCATCGTGGCCTTAGCGATCGCTGCCGTT  
GGCCTGATCAACACAGTGGCACTCACCATTTCTGAGCGTGCCCGCGATCGTTATTTGCTG  
CGCACCATTGGACTGACCTCAACTGGTCAGATTCTGGTGATGGCTATTGAAATGATCGCG  
CTCTCATTGCCGGCTGCCATTGTTGGTGACGTTTCGGGAGGATTCTTAGGCAGATTTCGTT  
GCCAGTTCTGCCACCAACACCGCTGCGACGGCACCACCTCAAGTAGACATTCTCGGCGGA  
ACGGTTCTCGCGATGGTCAGGATCTGTACTGTGCGCGCTCATCGTGCTGGCGAACAAA  
CGACGTCGGGTGGTT

>RXN00485-downstream  
TGATTATAAAATCCAAAAATCGA

>RXN00496-upstream  
CTGCAGAGATGGTGGGCAGCACCCAGGTGCTGTACGAGTTGCCCAACACAGGGCACTCA  
CGACACTTCGAAGCACACTTGAGCAGCAGGAGAACAAGTA

>RXN00496  
ATGACTCGACGCTACATGGTGGTGAGCAGGATGGCCAGGAACACGTTAAAGGACAGCTA  
AAGCAGCTGTTTCGACGACGACGCTTCTTGACTGACCTGTCCCGCGGCGTTGATCCCTCA  
GAGGGCGATGACGCCCTCGCTGGCCTCCTCCTCGATTTAACAAAGGAAGCTCAGGAGCCG  
CCGGCAACAATGCCGGATTGGTCTACTTTGCTCCCTGGAATTTTGGATCAGGATCAGGAT  
TTGCCAGTGGAATCCACTTCGGACACCACGGTTATGCAGGCATCAAACCTGCAACCCAA  
GAATTCGCACCTGTTTCTATTTCGTATACCCCCAACACTGCAACTAATTCAGCTGATGCA  
GATGAGTCCGCAACTGTTGTTCCACTTGACGACGCGCGTGAGAAGCGTGCCAAGAGCGGA  
TCAAGCGGGGTTTCATTCTACTGGATGCTTCGGCAACCCAGCGCAAATCTCACCCATTCCTT  
AGCGGTTTGGTGGGTGCTGCAGCTGCAACTCTAGTCATCGCAGGCGGTGGAGCAGCAGTG  
TACAACGCTGATGAAAAC TCCCCGTTGTATGGCATGAATCAGCAGCTGTTTGGCAATCAA  
GATTCTCCAAGCGTGGTGGAGCTTGCCCTCCACGCTGGAAGAAGTTGATAGTCGTACAGCT  
AGTGGCGATGTGGAAGGGGCACGTGCTCTACTCGAGCAGGCTCGAGCAATGCTGGATGGC  
ATGGCACCTCCTCGAAAGGCGCCGTGCGAGGCAACCCGAACGGTTGAATCTGAACCAGGT  
ACTCAGACGTTGACTGCAACGGTTACTGAATCCGCAAGTCCGGAACCACCGGTCACGGAA  
ACTCAAACCTGTTACCTCCACCGAGGTACAGACAGTGACAACCACTGCGGTTGCTCCACCG  
GTCTGGACTCCTAATCCAGAGCCAACAACACAGCTGCCCCGACTTCTACGCCTTCAACT  
GGTGGCGGTGAGGGAACCGGCAATGATGGTGACTCTGGACTTGTGCCACCTCAGACTCCT  
GGAAC

>RXN00496-downstream  
TAGGTAAAAATATAAAACTGCT

>RXN00503-upstream  
AATCCACGAAGGTGCCCAAGAATCACCAATTTTCGGTCGGAAC TGATCCTTCTTTGTCCGT  
TGAGACCCACAGGTGTTTTAAACATTTAGTATTAGTTCC

>RXN00503  
ATGAAACAGTCTTCTCCGTTGACCAAATCCGACGCGCAGAAAACACCCTTTTTGAGCTT  
CAGGCAGATCCGGATGAGCTGATGATCTCCGCGGCATCGGCGGTGGCCGATGTGCGCTTG  
GCAATGGTGGACGGCCCCGCTCCAGCGGTCTCCAGTGAGGAGTCAATCCTGCTGCTGGTC  
GGCCCCGGTGGCAACGGTGGCGACGCCTTGATGCAGGCGCGTTCTTGCAGAAGAAGGC  
CACCAGTTGATGCTTTGCTGTTGGGAAACGGCAAAGTCCATCAATCAGCATTTGGCATAT  
TATGAGTCTTTGGGCGGGCAGATCATTTCCGATTTTCCCCCTCACTACCTCTACCGCCTG  
GTGATTGATGGTTTGTGTTGGCATCGGTGGTCGGGGAGGGCTCACCCAGAGCTGGCCAGT  
TTGGTGGAGTCTTTTTCCGCTTCAGGTATCCCCATTTTGGCGATTGATGTGCCGTCTGGC  
GTGCATGCCGATAGTGGTGAAC TGCCGCGCGGTGATGGTGACGGTGGAAGGATTTGAT  
AATGATGCACCGATGGCGCGTCAGAAAATTCGGGCACACATTGACGCTGATGTACGATC  
ACGTTTGGCGGTTTGAGACGCGCCACGCGGTCACTCCTGCGTGTGGTGAAGTGCTCTGT  
GCTGATATCAACATCGCTGGTGGCGGGCGGAAAATCGCTGTCCGCTGAGTTGAGTCAGGTG  
CAGGCAGAAGACGCGACCCCGCAGATGTTTGCCCTCCAAGGCGTATCAACGGAAGATTTCG  
CTTTTGGCGCGCAATCTCAAAGCTACGGCGCCACATATCCATAGGATCGGCCAGCAC  
TTTACCGTGTTGAACATGGAGCCTGGCCCCGATCATGATAAATACAGTGGCGGAATTGTC

GGCATTGTTGCAGGTAGTGGCACCTATCCAGGTGCTGCTGTGCTGTCGGTGAAGGCGGCT  
 GTCAGGGCCACAAGCGCCATGGTTCGATACGTTGGCCCTGCGTTAAATTTTGTTCATCCAG  
 TCGCTGCCGGAGGTTCGTCGCAACGCAATCACTTGCCACCGCCGGCCGCTGCAAGCGTGG  
 GTGCACGGCCCCGGACGCGGGCTGGAGGCTGAGCAATCAGCCGAGCTTGCGGAGCTTTTG  
 AGCCGGCCTGAGCCTGTGCTTATCGACGCCGACAGCCTCTCATTA CTCCAGCTCTCAGCG  
 GAGCTTCGGCAGGCGTTGCGCGAGCGAAAAGCACCAACGGTGCTCACTCCGCACAAGGGC  
 GAATTTGAACGCATCGCAGCAGAATTACGCTCTGAAGGCGTCGAGATTCCCAAGCGGAC  
 AAAGATCCCATTGGTGCTGCGCAAGCGTTAGCTAAAGAATTTGATTGTTGCGTACTGCTC  
 AAGGGGAAATACACCGTCAATTGCAGCTCACGACTTTGTGCATGCGATCAACGCTGGGCAT  
 TCCTGGTTGGCTACACCTGGCTCTGGCGATGTGTTGTCAGGTCTTGTCGGTGCACACTTG  
 GCTCAAAGCTACGCAGAATTAAACCGCTTGCCGGAGTTTTCCTCCGATGTGACCTTGCT  
 GATTTCGGCGATTACACCCAGATTGCACCTGCTGCGACCATCCACGCGTTGCTGCTGGG  
 TTGGCCGCACGAACCGAATTTGGGTTTGCGCCGACCTCCGCAAGTTTGATCGCTGATGCC  
 ATCCCTGCAGCGACCGCCAAGGTGGATTGGAAGCGAATTGTC

>RXN00503-downstream  
 TAGCTCTGCATGAATTCCGTATG

>RXN00504-upstream  
 AAGGTGGATTGGAAGCGAATTGTCTAGCTCTGCATGAATTCCGTATGAATTCCTTTCTTT  
 CAAGTGGCCGAGATGTGAAGCGCACGGTTAATTGAGAGGC

>RXN00504  
 ATGACCTACGGATTCTTGTCAACACAGATCTCACCCACCGCGCGATTGACTTTGATTTA  
 GAAAACGCTGCGAAGTTCCTCGGCGGTGCCGATGATGGCCGCGTCGCTGTGCTTTCCAA  
 GAGGATGGCACCTGTACGCCGCTCTCTACAGCGCCAGCGCAAAAGATGAGGGTGCCGCA  
 GCAAACCCAGTAGCATCCCTTGCGCCGCAACGCCGCTGCTACCGGTGATGGCTCCTTCTTC  
 TCTGATCCGACCACTGCAATCTGTGGCCCTGTGATCTTCGTGGGGGCCGAAGGCGAAGAC  
 ATCAGTTGGATGAAATTGAGCGAATTAAGGACGGCATTTCGCGCCGCTCGTAAC TACCGC  
 GATGATTATCCAGAGGAATTC AACCTGTGGCGCAACGCTGTATATAACCTGCGTACGGCT

>RXN00504-downstream  
 TAAAGTTTGGCTGCCATGTGAAT

>RXN00505-upstream  
 TTGCGGAGCGTTTAGACACCATTA ACTATGAGGTAGTGTGCCGACCAACCGGCCGA ACTG  
 TCCGCGCATATGTTTAAGTGAATACGTTTAAGGAGCAGCA

>RXN00505  
 ATGAAATCTGAGTTTCCGGTATCCGGCACGAGGCGTTTGTAGCATGCCGCAGATACCCAA  
 AATTTTGGGGAAGAAATTAGGCAGGCATCTAGAAGCTGGCGATGTGGTGATTTTGGACGGC  
 CCGCTGGGTGCTGGAAAAACCACATTTACTCAAGGTATCGCTCGTGGATTGCAGGTGAAG  
 GGGCGGGTGACATCGCCGACGTTTGTGATCGCGAGGGAACACCGCTCGGAAATCGGTGGG  
 CCAGATCTGATCCACATGGATGCCTACCGATTGCTGGGCGAAGACAGCGAGGATGCTGAT  
 CCGATCGGTGCGCTGGACTCTTTGGATTTGGATACCGATTGGACTTGGCTGTGGTTGTT  
 GCGGAATGGGGCGGTGGCTTGGTGGAGCAGATCGCTGACTCGTATCTTTTGATTACCATT  
 GATCGAGAGACCGCTGTGCAGGAAGACCCGGAATCTGAGGCTCGAATTTTCCATTGGGAA  
 TGGCGCGAAGGCCGC

>RXN00505-downstream  
 TGAGAAAGTTTCCACGCTAAAA

>RXN00507-upstream  
 GTTCATGTTGA ACTATTTGTGCCACCAACCGCGGACAGAAATACGATTGGTGCCGGGGTTA  
 GTGCCAGTATGCCCCACGCTTTCAACTATCCTTAAACAC

>RXN00507  
 GTGGCTGAGAATCTGAACAAACACCTGTCCAAACTGTCCAAGCGCGGACCGCACCGCGTG  
 CTGGTAGGCGATATGA ACTACGCCGGCATCCCGGGCAAAATCTACACCCAGCAGAAGGC

GACGGCATCCCAGGTGTAGCTTTTCGGCCACGACTGGATGAAATCCATCAAGTACTACCAC  
 CAAACTTTGCGACACCTCGCGTCTTGGGGCATCGCTGTTGCCGCCCCAGACACCGAAAAT  
 GGCTTCATGCCAGACCACAAAGGTTTCGCCTCTGACCTCGAATCCTCCATTAGATTCTC  
 GGCGGCGTAAAACTCGGCTCCGGAAACGTACCGTCAACCCAGCCTGCCTCGGTGTAGTA  
 GGCCACGGCATGGGTGCTGGGGCTGCAGTACTATCCGCAGCAAACCGCGACCTCGTGCGC  
 GCAGTCGGAGCAATCTACCCAGCGAAAACCTCCCCCTCAGCAATCGACGCCGCCTTCGCT  
 GTCAAAGCCCCAGGCCTAGTCAATCGGATCCTCCAGCCTCGGCCTCTTTGAATCCGGCGAG  
 CCAGCAAAACTCGCAGCCAACCTGGGCCGGCGATGTCTGCTACCGCGAATCAGAAAAAGGC  
 AACCAACAGGGCTTCTCTGAAGACACCATGTTCAAACCTTGTCGCAGGAATCGGCAGCCCA  
 CAAACCGGAGCTCAAGAAACCGTCCGCGGCCTCCTCACC GGATTTCCTTCTCCACCAACTT  
 GCCGGAGAAAAAGAAATACAAAGCATTCTCCGAACCAGACGCTGAAGCTAAGAAAGTTGTC  
 TCCCTACTTCGGCCAGGAGCTGCAGGAACATGCCTTCCCTAAGGACACGTCCCCATTTCGC  
 TTCTTAACGAGAAG

>RXN00507-downstream  
 TAGTTCGCTTTTCTTAGTGGGTG

>RXN00510-upstream  
 ACGCTTTTACCCAAACAACCCAAGCCGCCGAGGAAGAAGTTAAACGATTCGACAATACCG  
 ACAAAGTTTTTGGTGCCGGATTTGATGGGATTGATCCGAA

>RXN00510  
 GTGAATGATCCTTTAGCCGGCTACGGAGCAGTGATCTCCGCACTACAAGGCGCCAGTGGT  
 GGGATGTATCGCGGACCGGCGAAATCCGAAGGCCAGTTGCGCGAGATGTACCAAACCATC  
 GAAGGGCTAGACACCAGCTCGTTGCGCGAAGCTGCCGAAGCAGCAGTGGGCGGAACGAAC  
 GAAGCCAGAATACAAGGGTGGGTCCGGCCCGCTCTTGAAATTCCTTCGGGACGGTTGGCGGG  
 GGAATGATCGCCACGGAGATAGCTGAACGGGCAGTCGATTGGTTCAAAAACCGTAATGAT  
 GTGGAAGAAGTCAGCGAAGCCGCTGATAAAGCCCGCGATGCGATCGACTCCACTGTGACA  
 GAGTCCGACCAAGGCATGATGCACATTATCCAGCAGCTCTTGACATTGTGTCTACGTTG  
 ACGCAGATTCTTGGCAGCATGGATCGGGGGAAATTTCTCAAGAATTCCGGGACTGTGTG  
 CAAACTGGAGCTGATCTTATTGACCAGGCAGGGGACATGCTTGAAGGATTGTGCGCTGAT  
 CGAGATGATGCGATTTACAGTGTCTTCTCCGCGTTGACCGATCATGGAAAACAAGTTTGT  
 GAAACTGAGCCAAAGCCGTTGTGTAGTGCAGCTTCTGGGGGTTTCATCTGGTGGAGCGACT  
 TCTTCGGCTGCGGCCCTTTCAGGTGGTTCAAGCTCGAGCACTGCTAGCTCTGGGAGTTCT  
 GGCGGATCGAGCAGTGCTGCGGATAGTTTCGACGTCGACCAATGCTGAATCCAGTGTGAA  
 AAGGAAAAGACCACCTGCTGCCGTTGAGAAAACCTGACGAGAAACAGTGGAGAAGCCG  
 GTTGAAAAGACGCCAGAAAAGCCGTTAGAAAAACCTGTCGAGAAGCAAGAGTGTGAAGAA  
 AAGCCTGACCCCTGACCCGGAAAAATGCAAAACAGAGCCGGTCGAGTGTGAGCCAACACCG  
 AAACCTGAAACAGAGCCTGAACCAAAACCGACACCCACGCCACACCCGGAACACCAACA  
 CCAATACCTGAGCTAGAGACTGAGGATTGTGAACCTGGCAAGGAGACGGGCACAGACTCA  
 GAATCTGAATCGGAAGAGTGCAGCCCCGAGCTCAATGACGTTCCAGAAGAGTCGGATCTG  
 ATTGGGCAACTCATCAAGGGAGCAATCGGTATTGGGATTGTTGTTGTAGGCGTTGGGCTG  
 TTGGTGAATTTCTTGGAGCAGTGCGTCCCTGTGATTGAAGAAGTACCTGTGCCGGAGCCC  
 GAGCCTATACCTGAACCCGCTCCGCAGCCTGAGCCAACCTCAGTGAACCACCAGAGTCT  
 GAACTAGATAAGGTGGCTGAGCCTGCGCCGAAGCCAATTCCACAAGCTAATTACACTGCT  
 GCTGCAGCAACTAACTATTCCGCTCCCGCGACGCTCCCGTTGTCCCAATTACGCCGGCA  
 GCACCTGAAGTTCCGGCAGCACCAGAAGTGCTGCACCGCGGTTAATCTTCAAGGCC  
 GGCGGGTGG

>RXN00510-downstream  
 TAGCGGTGGAGTATGCGGAATTT

RXN00515-upstream  
 GTTGACGCACTGAAGAAGTAAAGTCTCTTCACAAAAAGCGCTGTGCTTCCTCACATGGAA  
 GCACAGCGCTTTTTCATATTTTATTGCCATAATGGGCAC

>RXN00515  
 ATGCGTTTTTCTCGAGTTCTTCCCGCACTTCTTATCACCACCGCCGTGAGCATCCCAACA  
 GCATCTGCTGCCACACTCACC GCCGACACCGACAAGGAATTGTGCATCGCCAGCAACACC  
 GACGATTCCGCGGTGGTTACCTTCTGGAACCTCATTGAAGACTCCGTGCGCGAACAACGC

CTCGACGAACTAGACGCCCCAAGATCCAGGAATCAAAGCGGCGATTGAAAGCTACATCGCC  
CAAGATGACAACGCCCCAACTGCTGCTGAACTGCAAGTACGCCTCGATGCCATCGAATCC  
GGCGAAGGCCTAGCCATGCTCCTCCAGACGATCCCACGCTGGCAGACCCCAACGCCGAG  
GAAAGTTTCAAACCGGAGTACACATACGACGAAGCCAAAGACATCATCAGCGGATTCTCC  
AGCGATCCAGCCAGCGATGTACTCAGCCAACCTCAACAAGCCGCCACCACCGGCACCCGC  
ACCGCAGAAATCCGCGCCGGAAGTATTCGCCGACCGCACCGATGATTACAACGAATCCCAA  
ACCGCTCTTAAAGAGGATTTCCAAAACCTGCATCGATGCCATCGATGACGCCCCGCCAATC  
CCACTGCAGTACATCCTGATTGGAGGCGCCATCGCTTTGGCGGTCATCGTCCCTCGGGATC  
AGGGCGTGGACTAACTCAAGGAAGCAGTCCAAGCACAGCCAG

>RXN00515-downstream  
TAATACGCCAAGCAAAAAATTGC

RXN00527-upstream  
TTCCTTGGCCCCGAAGAAATTAATCATTGTGGCCGTGGTCTGATTTTGATCATTGCGGC  
TGCCTCGTTTTATTTCTGCGTTCATCATCGAATGACCAG

>RXN00527  
GTGATTGCCACTTCTGATGTTCCGGGAGATTTCCCTCCGAGGGAATCGTGGCGCGTGTGTCT  
GTCAACGGAAATATTGAAGCTGCGCGAACCACCACCATTTACACCAGTCTGACTGTGCCG  
GTCGCGAACCTTGCCGGTTGCGGTTGGTGACCGTGTGGCAGCTGATCAGGTGTTGGCTGAG  
TTGGATGCCTCTGCCCTGCAACGACAGTTGGATGAACTGATGCCAACAATGCGCGTGCA  
GCCATGGCGAACCAGCAATTCCATCGCGCAGTCGCAGCAAGCATATGAGCAGTCCAGGGAA  
CTTCTTGATAGTGGTTTGAGCCCCGAGATCAACTCGGCGCGGTCTCGTTGCGGGCGTCC  
TCACAGGCATATCAGGATGCGATCCGCGAGTTTTGAAGCGAAGCAGCGAGATGTGGATGGC  
GGATTGGATTCCACCATGGTCGCTCAATCGGATGCTCTCAAGGCAGCTCGTGAGCAAGCA  
GATGCTGCTGAAATTGAACGACTGCGCGCGGACTTCGGACTGCTCAACAACGATCGCAGC  
AACCTCAACGATGTGATTGGTCTGCTCGATGAGAGAGAATCTTTGGCTTCTGCGGAATCC  
GAAGTAGCTCAAGCCCGCGCTGCAGGTGACCTAGAGGCAGTGCCTGCAGCTGAAGCAAAG  
GTTGCAAGGCCTGGAACAATCAATTGCTTCCAAAACCTCCACGTGGCCTAGCCAAGATCAG  
ACTTACTTGCAGTCTTACACCGCTTTGGAGGAAGCTGAGCGACGCGTCGCATCCACCACT  
GAAGCTCTAGAAATAGCCGAGCGGATCTACATTGATTCACTCGGAAAAGTTGACTCAGAA  
CTAGCCGCGCACAGCGCGCCGTGCGCGAAGCCCACTCAGCACACAAGACGCAGCACTT  
GGCCTCGAGACCGCGCAGCTTTCCACCCAACACCAATTGGAAGCCCAATCAAGCGCCATC  
GATGCAGCTTTAGGTTTGGCATCAGTAGATAATGAAGCCGCCACCAGATCCACGTCCAG  
CTGCGGATGGATATCAACAACACCACCGTTTCGCTCCCCATACTCAGGCATTGTTTCATCC  
GTGCAGGCAGCCCCAAGGTCAACCAGCAGCCGGCGCACTGTTGAGTGTGTGCTGATGATTCC  
GAAGTGAAGATCACCGCGAATGTAAAAGAAGCGGAGATCAGCAACGTCACCATCGGATCC  
CGCGTCAACCTTCATACCCCATCGACCGGAACCAAGAATTGCGCCGGCCGAGTATCCAA  
GTCTCCCCCATTCAGCTGCGCGCAGTGCCCCAGCTACAGGTGAAGGAGCTGCCGCAGGC  
GCCACAACCACCAACACTGACGTACCTTCCCCATCGAAATTTCCGTACCGGCGACCGC  
GAAGGCCTCAACCTCGGCGGATCCGCTCGAGTACGCATCGTCCATGAAATCGCACACAC  
GTACTGACCGTTCTTTGGAAGCTGTGTACAAAATGATGACGGCAAAGACGCTGTTTTG  
ATCATCAGCGACGACAAACAAAGTAGAAGAAGTAGAAGTAAAAACAGCTGAATCCGATGAC  
TTTGATATCGCAGTCAGCGGTGCTGGAATTTTCAAGACGCTCGAGTGTCTACCCAGCCT  
GGAAACTACCGGGGCCCTCATCGGAGAACTGTGAAACTTCACGCAGATACGGTGGAGCAG  
GCGGCGGCTCCTTTTAGTCCTGCGGCCCTTTTGACCTGCAGCCCCCTGCCGTTTCTGCC  
AAGCAAACCGTGGGCCAGGTGATT

>RXN00527-downstream  
TAGCCTATGAGCCTCATCGAAAT

>RXN00547-upstream  
GGTCGTAGCCTAAACGACCTTAAAAAGGAGCCGACCGCCGATGGACCAGAAATTGGACCA  
GCAGAAGGTAGACCGCGTATCGCCCGGTGATAGTGAACCG

>RXN00547  
GTGGCACGGGATTTTATCAATGCAATCGGCGGTGCGTTTGGTCTGTTTTGCGCAGGTGGGC  
ACTCAGCGGTTCTGGACTCCCTGCGTGTTTTGATCACCACCTCCCTGGTGTTTTTGGCC  
ATGGGGTTTTTAAACAAAAGCCAATTGCATCCAGGGTTCTAGAGGTACTGATGGTGTGGTT  
TCTTTGAACTGGTTCGGGAAGTCGCCAGTACACCTCAGCCTGTTACAACGACATCGTTCCG

CTCTATGGGGGGCGCGGAATTGATGCGCCAGGTTTCCCTTATGCCCTTTTCGTGGCAGGAA  
GGTGATCTCACCAGGTACATGGAGTACCCGGTGTGGGCGGAATTTCCAGTGGATTTGT  
GGCATTATCACGCGGTTTTGTACCCGGTGTGTGATGTCATTCCGTTTCATACGCTGCCT  
GAATCTGGTCTTTATTTTCATCGTCACCGCGCTTGGTGGCGTTCCTTTGGGTGTTGGTC  
ATCCGCATGATGGTGGAGCTCACTGGCAATCGAGTGTGGGATACCGTCCTTGTTCGCGCG  
TCTCCCTGGTTGCTGTGCATGCGTTTACCAACTGGGATACTCCAGCCATTGCGGCGGTG  
ATTGGTGGCATGCTTGGCGTGAAACGCGGAAACCCCTTGGTTGCGGGTGTGCTGATCGGC  
GCGGTACGGCGTTCAAATTTGTGGCCGCTTTATCTTCTTGGTGGCATTTTGGTGTGGCG  
GTCAAGAATAAGAATCTCAAGCCGTTTATCACCATGGCTGCAGCGGCTGCGGTGACATGG  
CTCGTGGTGAATGTGCCAGTGATGATCGCGTACCCCAAGGCGTGGAAATGAATTCCTTGCGC  
CTGAACCGGGAGCGTGGTGCGGAGTGGACCAGATTTACCAGGTCATCGACCGTAATTTG  
CCGATCAATTTGAATGATCCAGTGCTGCTTAATGTGCTGAGCTTCGGCTTGTTTGGTGCA  
TCGTGTGTGGCCATTTTGATCCTTGGGCTCAAGGTGCAGCGCACTCCCCGAGTCGCTGAG  
CTGGCCTTTTTGATTGTGCGCGCGTTTTTGCTGTTTAAACAAGGTGTGGAGTCCTCAGTAT  
TCACTGTGGCTGGTCCCGTTGGCTGTTCTGGCATTTCTCAGTGGAAAGTGTGTTCCCG  
TGGATGGTTACAGACGCCATGGTGTGGCCAATTTTGATGTGGCACATGCTCGGCACGGAC  
AACAAGGGACTCCCCCATGAAATGTTGGATCTCATCGTGATTTCCCGAGATGCC'TTCATT  
GTGGTCATGATAGTAGGTGTAATCCGGCAGATGCTCGGACGACGTGCAGATCCGGTGATG  
GATGCGCACGCCGGGCGCGATTTGTTGGCCGGGCCCTTCGGCGCAGGCGAGCGTCGAAAA  
GCATTGAAGGAAGTAAGT

>RXN00547-downstream  
TGAGCACAACAGTTTTGCTGGTC

>RXN00552-upstream  
CCGCCAACAAGGCAGCAAGCTCGATCCAATTGACGCCTTGGCTTATGAGTAAAAGCCTC  
GTTTTTAAGGTAGCCACACATCGCACTAGACTGAAGAACT

>RXN00552  
GTGGCTACCTCAAAAAATCTTCTTTATTACGCATTACCCCGCTCTCTGACCTAAAGCG  
GTTTCACTGTGGCAGCGTGAGCTCTGCGAGTCACTGAATCTTCGTGGCCGCATCCTGATC  
TCCACTCACGGCATCAATGGAACCGTGGGCGGAGATATTGATGATTGCAAGGCGTACATT  
AAAAAGACCCGCGAGTACCCAGGTTTCAACCGCATGCAGTTTAAAGTGGTCCGAGGGTGGC  
GCTGAGGATTTCCCAAAGCTCAGTGTCAAAGTCCCGCATGAGATCGTTGCCTTCGGCGCT  
CCAGATGAGCTCAAAGTGGATGAAAACGGCGTCGTCGGTGGCGGCGTTACCTGAAACCA  
CAGCAGGTCAATGAGCTTGTGGAAGCCCGTGGCGATGAAGTTGTGTTCTTTGACGGCCGC  
AACGCAATGGAAGCCAGATCGGCAAGTTCAAGGACGCTGTTGTCCCTGACGTAGAAACC  
ACTCATGATTTTCATCGCAGAAAATTGAGTCTGGAAAATACGACGATCTCAAAGACAAGCCT  
GTGGTCACTACTGCACCGGCGGAATTCGTTGTGAGATCCTGAGTTCATCATGATCAAC  
CGTGGTTTCAAAGAGGTCTACCAAATCGATGGCGGCATCGTTCGCTACGGCGAGCAGTTT  
GGCAACAAGGGCTGTGGGAAGGCTCCCTCTACGTTTTCGATAAGCGCATGCATATGGAA  
TTCGGCGAGGATTACAAAGAGGTCCGACACTGCATCCATTGCGATAC'TCCCACCAACAAA  
TTTGAGCACTGCCTCAACGAAGATGATTGCCGCGAGCTCGTGTGATGTGCCCTGATTGC  
TTCGCCAATGTTGAGACCCGTCATTGCAAGCGCGAACGCTGTGCAGCAATTGCTGCGGAT  
TTCGCTGAGCAAGGAATTGATCCGCTCGTTACTTCT

>RXN00552-downstream  
TAAAAAGGGTATGGTGGCTGGGT

>RXN00555-upstream  
CCTGGTGGATATCATTACTGAGCTTGAGAGGTGTACGGTAGCTGGAAAGAGACCGACAG  
CGGTTCTTAACAGTTTTCTCCATCTCAACTCCGGAATTTG

>RXN00555  
ATGAAACAACCCCTTCGCGTACTTATTTCTTGTGCGACCCGAAGAAAATTCGGGTGGCAAA  
CGTAGTGAACAAAATGATGCTGTTTTTGTAGTTGCGCCGATGGCTAGCTCGTACTTCAGAC  
ATCAATGTTTCGTGGAATCACAACTTTTCATACGCCCTTGGCCGCT'TCCTCCATCAGTAAG  
CTCGGAGGAAAATATCATAAGTGGTATAAGAATTTAGATTCTTACTACCGCAGTCGCACG  
ATCAAGGGACTCAAAGAGGCCGGAGTTGAGAAGTCCCAATGGGACGATGATGTTTCAGTT  
TTTGTAGATGGTCTTCTGAATCCACGCTGCTCACCCATGCTGCTGAAGAATTCGAAGCG  
GACCTCATTTCTGCTTGGCTCTGATGCGACCGCACCAAAAGGCCGCTTTCTGGCCAGCTCC

ACCGCAGATGCCCTCCTTCACTCCTCGCCCGTCCCACTAGGACTTGTGCCGCGAGGGGTG  
AAGCTTTCCAAAAAGGGTGTCAACCGCGTCAACTACGCTTTCACCAATGAAAGCGATGAC  
TTTGAGCAAGGTTTACGCTCTTCCGCGGAGCTCGCCACCAATTGGAACGTTCCTCTTCGG  
ATCCTTGCTTTTTTCAACACAGGCATTACTTCCGCACCAACGTGCGGGAGCTTGGATATT  
TCCACTGAGCTTTCCTCCGAGTGGCGTGAACCTGAGCGTGAGCAGTGAAACCGGTCTGCGCTGG  
GATGGCGTCCCTACAGACCACCCAAACTTGAGCGTGAGCAGTGAAACCGGTCTGCGCTGG  
GGTTGGAGCGGTGCAATTGATGCTTTGCGATGGAAGAAAGGTGACCTGCTGTGCATGGGA  
AGCCATCGCACAGACACCCCTTTCACGTGCTTTGTGCGTTTCGGAACAATGGAAATTATC  
CGAAACTCTCTGTACCGACCATCATTTATCCCGGTCTT

>RXN00555-downstream  
TAGGCTCTCCAACAGCAGAGGAC

>RXN00560-upstream  
AAGGACGACTTCTGGGGAGCGGTGTGGATTCTCACGGGATTCTCATGCGGATTATCAGA  
CATATGGACACTTTAACGGTTCGTACTAGGCTGATGCTTC

>RXN00560  
ATGAGGATTGATCCGCTGGAACCCGGCAAGCCGTATTGGCCGTCAAAGACTGGATTGAA  
GGGGAGGGAGACGTCAAAAAGCCTGGTTCGTGCGGCACCTTGCCGCGCAACTCGCCTGAGC  
GTCCGACTGCTCGCGCAACACGCGCCGGGAAACAGCGTGGAGGTGCGGGTACCCCCATTT  
GTTGCGGTGCAATGCATAGAGGGGCCAAAACATACACGCGGCACACCACCCAACGTGGTG  
GAGACCGACGCCAAGACCTGGTTACGCTTAGCACCTGGGCAAACCACATTTGATGCAGAA  
TTTGAAAGCGGAAAAAATTAGCGCATCAGGTACCCGAGCCAAAGAGATTGCGGACTGGTTA  
CCAGTGGTCAAACCTT

>RXN00560-downstream  
TAGATTTCTAATGCTCATTAGT

RXN00574-upstream  
AACTGCTGGGCACTACTGAGATTCCCATGTGGGATGTGGACCGGTGGCAACCATCGCTTC  
TCAAGCCCGGTGATTCAGTTCGATTTGTGCAGGTGAAGAA

>RXN00574  
ATGAGCTTCAAAGTAATTTCCACTGGCCCCCAAGCCATCTTCCAAGACCGAGGTGCGCTTC  
GGTTTTTGCCAGCGCTGGTGTGGAACCTCAGGATCCTTTGATCGTTTATCCGCTGCTCGC  
GCGAATCACGCTTTAGGTAATGATCCCAATGCAACCGTGGTAGAGATTCTGCTCGGTGGC  
TTTGAGGTGGAGGCGTTGCACACCACCTCGATCGTGTTCACGGGAACCTGAAGCTGAAGTG  
ATGGTTTGAACCGGCTGGTGGACAATCCAAAAATGCCACCACCAACCATCATCGATGTT  
GCAGCTGGTGAACGTATCCGCGTTCGAGCCCGCAACCTATGGCATGCGTGCCTACTTTGCT  
GCTCGCGGTGGATTTGCAGTAAAAAAACTTTGGGATCTGCTTCAACCGATCTGATCTCC  
CACATGGGCCCCCTGCCCCGATCGAGCCCGGGGATGTCATTGACGTAGCAACAGACATTGCA  
GATTCTCAGTGGTGGCCAAAACCTTCGGCAACTGCCACCTTATGGAAACGCATGCCAACA  
GAAACGCTTACCGTCATCCGAGGTCCACGTGACAAATGGTTTCACGCAAGAATCCCTCAAC  
AACTTTTTTACTCAGGTGTTTACGGTGAGCAATGACTCCAACCGGATTGGTTTGCGCATG  
CACTCAAGCGAGCCGATCCAACATCGTGTGGAAGGCGAGCTGAAAAGTGAAGGAATGGTC  
CGGGGGTCCATCCAGATTCCGCCCTGGTGGAAACCCCGTGGTGTGTTGGTCCCGATCATCCT  
GTGACCGGTGGCTATCCAGTAATAGCAGTACTTACATCAAGGTGCTGTGATCGTTTCGGCC  
CAGCTGTTGCCGGGCGATAAAGTCAGATTTAAATTGCTT

>RXN00574-downstream  
TAGGAACCTTGAGCTTGCTCTGG

RXN00589-upstream  
CCGTTATCTCCGTAACCTGTTGTTTCTGCAGAACCATACAACCTCAGCAAAAGCCGCGACAC  
TCCGCGGCAAAAACCTAACCAAGGATTTAAAAGTCTTCAA

>RXN00589  
ATGACAACTCTTTCACGTAAGTTCTTCGTTTCTGCTACCACAGCCCTGGCGGCAGTCGCA



CTGGTTGCGTGTTCCCCCTAATGAGATTGATTCTGAACTGAAGGTGCCAACGGCAACTGGC  
GTTTCTTTTACCTTCGAAGAACGTTTCCGCGACCTCAACTGCTACTACAGATGAGGATGCG  
CCTGGCTACATTGATTGCGTAGCCGCACCAACTCAGCAACCTGCTGAAATCTCACTAAAC  
TGTGCAATGGATATTGATCGGCTCACGGATATTTCTTGGAGCGAATGGGATACTGATTCC  
GCAACTGGAACCGGTACCCGCATCGTAACCGCTGCAAATGGTCAAGAGACCGAAACCGAA  
GATATTGAGGTGAAGCTTCTCTTCCCCACCGAGTCTTCCCAAGGCCTAGTGTTCACCTCAG  
GTCACCGTCGATGGACAGGTTCTCTTCCTC

>RXN00589-downstream  
TAATCCTCCATAATTAGAGAGCG

RXN00616-upstream  
AACCGCAACCTCGCGCACTTGGAGTGAAAATTCTCATCTTCATTTTCATCTTGGTGCCTAA  
CAATGGAATACAGATTGAGTTGATCAAAGGAGAACCCCCA

>RXN00616  
ATGAAATCACTCCCCCGTTTCGCCCCACTGATTACGATTCTGGCTCTGCTCGTACTCGTT  
GCCATCGGAGGATCTGCACTGGCAAATAATCGTGCTACCCCTAATGTGGAAAGTGAACCC  
GCCACGGTCAACCAGCGTTCCACTCCCACTTCCGCGTATGAGCCCCCTGCTACAGAA  
TCTCCGGAAGAACCAACACACAAATTCAAGAATCCCCAGTACAACCCCCAGTTCTTGCC  
CCCCGCTCAAATTCCTCAAGCCCCACAAGTTCCACTCAATTATCAGTACTATGACGATGAC  
TGGGACGACGACGATGATGACTTCGACGACGACTGGGACGACGAC

>RXN00616-downstream  
TAACTAACCCTGAGGCACTTTC

>RXN00647-upstream  
TGCATTCTTCCCACAATGACATGAGCTTATTGCAACATCGTGGGTAAAGTTGAATCGAGA  
AGTCGAGAAAATAACCGACCGATGAAAGAGTTGAGACGATA

>RXN00647  
ATGGGCATCTTCGAAGCCATCCGAGCCGCACGCGGAAGACCAAAGCTGAGATCAAAGCA  
GCCGAGGCAAAAGTAAAACTGAGGCGAAAAACAAAGCAAAGCTAGATCTCAAGCGCGAG  
AAGCTTCTTGTCAGCAGGAAAAGAATCTGCTCAAGGTTGAAGAAAAGGGCCTGAAGAAG  
CGCAACAAGCATGAGCTGAAGATGGCCAAAAATATCCTTGAGCAAAGCGCCAAGGACGC  
CTAAACAAAGACAAGGTGAAGCGCTGGGCTGGCACCACGCTGTGCTCACTCCACTACTG  
CTGCCTATTATTTATCGACTCTCCACCGAAGCACGCGATCAGGTTGTTAAGGGACGTGCC  
CGTCGTGCAGGTGTCACCGCGGAGCAGCTTAGCCAATTCGCAAGGTCACGCAGCAGCGCTG  
AAGGCTCGTATTCAAGGTGTTCCGGAACCGCAAAGAACTCCAGCCTCCCTGCTGGCTTT  
GTACGCGATGTTGAAGAGCGTCTCAATGAGCTCGAGGCTGCTGCGAATAACTCTGAGTTC  
ATGCTCCACAGCAGGGAACCGTGCGACCAAGTCGATCAGTCTGATCTGAACCAGGTG  
TCAGATCAGATTTCAGGATCGACTACTGGACAAG

>RXN00647-downstream  
TAGCTGCTGGTCGAGTCGCTGCC

>RXN00653-upstream  
GTTGAGATTCGCCTAACAAAGATTTTGGACGAAAACAGTAACGATGACAGCCACGTAAAG  
CGCGGAATCTTCTCGCAATGGTAAAAAGCCGCGGCTCGA

>RXN00653  
GTGAGTGTTTCCAGGTTGTTGGTGAAATCTTGCTCACCGTAGGCATTTTGGCCTTGTTA  
TTCGCATACTATGAGGCCATTGGAACCAACGTGGAATCTGGGAAATTACAAGAATCGGCT  
GGTCAAAAGCTTGATGAAGACTGGAATGAAGCTCGGGTGAATCCTCGACAAAAGCTCACC  
CCGGAACCTGGTGAGGCATTTGCCCGGATGTATGTTCCAGCTTTCGGCTCTGACTTCAAC  
TTCGCAGTGATTGAAGGAACCGATGAGGAAGACCTTCTTGCCGGTCTTGCCGTTATGTG  
GATTCCCAAATGCCCTGGTGAAGCCGGAACCTTTCAGTGCGAGGCCACCGAGTGGGCAAG  
GGTGCGCCATTCAATGATCTAGGAAACCTGGAAGTCTGCGATGCGATCGTGGTGGAGACT  
TACAAATTCCTGGGATGTGTACCGCGTGATGCCGATGTCCACCAACGGTGCAGATCGTGCA  
GCAGAAGCTGCGGATTGCTTCAACGAAAACAGGTGAGCCGCATGGCTGAAGGTGACTAT  
GTGAATGTGTCCGGACGAAGCATCACCACTCCGGATCGCATCGATGCCACCTACCCCA

CCGGGCGTCTTCGACACTGCAGTGCCTGAAGGATCAGAAGCTCTGCTTACCTTGACCACG  
TGTCACCCGCGAGTTCTCCAACGCTGAGCGCATGATTGTGCACGCAATGTTGGTGAAGAA  
ATCGATAAAATCAAGTGGCGAACGCCCTGCAGCTTTGGAGGAAAAC

>RXN00653-downstream  
TAAATGTATTCACTTCTGTGGCA

>RXN00662-upstream  
CCCTCATCATAGTTTTTAAATCTGGGGCAGAGGCGGGAATTTAAACACCTCTGATACAGCG  
TTTACTGGCTATAGTGTGCGCGTGCCAAATCGAGTTCCCT

>RXN00662  
GTGTCAACCATTCGCTGAATCGTCTAGCCGTTATCGCTGCCATCATTGGTGTGCGGTACC  
GGGCTGTTTGTGTGCTGCACTGAACCTGGTCTGCCATTGGCGTGAGCGTTTAGTTTATGGC  
GCTGACCATTTGCATAATTACAATCCGGTGGCCAATGTGTGCGCCACTTCGCCCTGTCCATC  
ACGGTGATTGTGCTTAGCGTGGTGGCCTCCTGGGCGTGTTTGTGTCACCGCACGGGG  
CCGAAAGAGGTTTCGATTGTGGGTGCGATCCGGGGCGAGAAGATGCCGATTTTGGAGACC  
ATAGCGTCCGCATTTTTGTCAGGTACACACGGTTGCTGCGGGTGCGCCGGTGGGTGTCAGAG  
AACGCTCCACGTATTGTGAGGCTTGGTGGGAGAGCGGTTTAGTCGGTGGTGTGAGCTC  
GATATTGATGCAAGCGCATCTTGGTGGCCTCTGCCGCGGGAGCTGGTTTGGGAGCAAGC  
TTCCACCTTCCCTAGCAGGCGTGCTGTTTGCCTTGAGGTCCCTACTGGTTGAGGCCCTCC  
ACTCGGACCGTGTTATCGCAATTATCACCACGACCGCCGCGCTTGCCACCCTGGATTT  
TTCGTGCAAAACCCAGATGTGTTACGACTGTCCCGCTGACGGAAGCCCATGGATGCTG  
CTTGCCGCGATGGTCACCGGAGTAGTCGCCCGCATGTGCGGGCACTGGTTTTCAGCGGCG  
GCGCAGAAAATGGCGCAGGCCCTCGCCAAAGGTGTGAAGATTTTGTGGCAGATGCCGTTG  
GGTTTCGTGGTGATCGCTGCGGTGATTTATTTCTTCCCGAAACCCCTGGCGAATCCCCGT  
TGGCTTGCCGATTCCATGCTCGGCGATGGCCTGATCCTCAGCACCATTTTATTGGTACTT  
GTTCTGCGCACCGCCATGTTTTTGTCTCGCCTTCCGCGTGCGCATGGTCGGCGGTAACCTG  
ATCCCCGCATTCGCACTCGGATCCATGGTCCGTGGGGTAGTGGGTGCTGTATTGGAACCC  
ATCACTAACGTCCCGATCGCCGCTTTTGCCTGCTTGGCGCCGCCGATTTTGTCCACC  
ACCATGGCAGCGCCACTGTTCCGGGCTCATCGCCGAGTGGAATTCACCGACATGGAAGCC  
CAAGGTACCTTCCGATTTTCCCTCGCAGTAGCCTCCGCGGTCTCGCCGTGCGCGTGTGG  
TCTGTATCGCCAAGCACGAGCTCCGCGCCATCCCGATCACGTACGCGAGCTGGACGGGG  
GAGCTTAAA

>RXN00662-downstream  
TAAGCTTGTCGACGCTCCCTCC

RXN00666-upstream  
AGTGGTGAATGCTGGATAAGTTTTTAACATGTCTAGTGTAGTCGGGGAAGGCCAAAACC  
ACGATTGAGCGTGCTTGATCTCGTCGCGCTGAGTGAAGG

>RXN00666  
ATGACGGCCGGCGAGGCCATTGCACACAGTGTTCGCGCTGCGCAGATCGCCGAAGAGCAC  
AATTATGCGCGTTTCTGGGTGGCGGAGCACCACAACCTCGGAAGGCTTGGCATCTTCCGCG  
ACGACGCTGCTCATGGGTCTATTTGCAGGCCACACTTCACGCATTCGCGTTGGCTCCGGT  
GGCATCATGATGCCCAACCACTCCGCGCTGCACGTGCGCGAAGAACTCGGCACCCTTGAG  
GCCATTTACCCCGGCCGATCGAGGCCGGCCTAGGGCGCGCACCAGGAACCGACCCCATG  
ACGGCGCGGGAATTGGGTGCGGCAAGTTTCGCTTGTGACGACGTCTCTCCACAATCGTC  
TCCCTCCAGAAATTTTGGACACCCCCGAAGAACGCCCGAACATCATCGCGCATCCAGGA  
ATAAATTCGCGTGTCGCGCTATTCATGCTGGGATCTTCCCTCAACGGCGCTGCGATGGCC  
GCTAAATTAGACCTTCCATTCGCTTTCGCCAGCCACTTCGCACCCTTCCAAATGGGGCCC  
GCCATCGCTCTTATCGCGAACTAGCAGCCAATCCTTATGTCTATGGCCGAGCGAATGTC  
CTGGTGTGCGACACCGAGGAAGAAGCCGAATTCAGATCTCCACACTGCACCAATGTTTC  
GCCGGAATCGTGACGAACTCCCGCGGCAAACTTGCCCCACCACTGCGGAATCTGAAAGAC  
AAACTCGACCCGATGATCTGGAAACACATCGAAGATTCATTGGAATGACTTTCATCGGA  
ACAGCCGAATCAGTGGTATTACAACCTGCAGGAATTCGCTGATCGCTACAAGTTAGATGAG  
ATCATTACAGTCACCTACTCCTACGACCCCGAAGTCAGGTTCCGCTCCATAGCTGCACTT  
GGCACGGCATGGAAT

>RXN00666-downstream

TAGTGTCAAAAGCCTCAAAAATA

>RXN00704-upstream

TCAAATTCTGCGCACAAAGTGTCTAAGACGACGTCTGCCCATCGGCGCTCTAATGCACA  
TTACAGCGTTTACAGAATTGAAAATGAAAGGTTCAAAGCC

>RXN00704

TTGACCATTACTTTTAGCCGCGTTGCTCTGACCACCCTGGCAGTCACCGCAACCACTTTG  
TCCCTGAGCACTGCTGCGAATGCACAGTCTTCCTTGTGGATAAGACTCTTGATGCCCCG  
CAGTGCATCGATGCAGACAACGTCTGGGTCTCAGTTGACTATGGTGCAGATTCCGAAAAA  
GAACCAGAGGGCGCATGTGCCACCGAGTTCAGTATGGTGTGTAGCTCTTGAATCTGCT  
GGGTTCAAACTGACCTTTGACGAATCTGAAATGGGCAAATACATGACCGGTATCAACGGA  
GTTGTTCTCTGATTGGGTTGAACTGGAACCTACTGGAGTTACTACTCTGGTGAAGTCGCA  
GATGATTACAGCGTGGACTACACCTACTACGAGGTTGGTGCATCTAATTCTGAACCTGAA  
GGTGGAACCTGTTGAGGCTTGGGTTGTTGGCACCGGCGAGGAAACACCAGCACTCGAGACT  
CTTCCTGAACTCCAGCAGCAACCGGATCTTCTGAAGACGGCGGCTGGATTGCAGTCATC  
GCAGGTCTTCTCGCACTGATCGGTGGTGGAGTTGCAGCTTGTACCAGGGCTTGATCACT  
ATCCCAGGTCTGGTTCTGCCTAAGTTT

>RXN00704-downstream

TAAGCAACCTAACCTAAAGCTTC

>RXN00712-upstream

TGTTGCGCGTTAATAAGGAACAATATCGGTGTGATTGCGGATATATTAATCAGCTTGTTT  
TCCCAGCATAAGTAGTCGCCTAGTTTAGGAGGTACATGGC

>RXN00712

ATGTCCCTACGCAAGAATCTCGCCCTCGGAAGCAGCACAGTACTACTCACAGCCGTGCTA  
AGCGGGTGTGTTTCCCTTGATGAGCGCTCCACTGATACATCCACGGAGAATGTCACCACG  
GTAACCTGCCACACTCACTCCACCGCCGAGCAGAGAACCCACCCTAGAACGACTGTGCAA  
AGTGCTACAGAAGCCTCCACTACTGCACCAAGTGAATGCAATTTGGATCCCCGTACCTCG  
GATTTTGGGCCATATCTTGCAACAATCTCGCACCCCGGTTGGTGAGCTAGCTGGATCTGCA  
GATTCCGTGCTGCAGGTTCCCTGACTGGTTCTATCACTTCCAAATGGGCGACAACGGCTAC  
GATTCCGTGTTCCAAGCTCAGCTATGTGGTTCTCAACGGTTCCAATGGAGACGCCGAACGT  
TCTACTGGAACGGGTGCTGCGATCGCCGACGTGGTGGTGCTGTTTATCGACGGCCATATG  
GTTGCTCGTCTCTCTCTTTTGAATGAAGACCGTGGAATCCGTCACCAGAGTGTCAGAT  
TCAGAAATCCAAGTTGTTTACGGACATGCCGGCCGATCTACTGCCGAAGGTGTTACGGAC  
TATTTACCTTTAACTTCTTCGTTGACAACGGCGTTCTTTTTCAGGACGCGGCGATCTCCCA  
GAACACATCGATACTCACATGCGTCTATATCTGCTG

>RXN00712-downstream

TAGCCCCATCTAAAACTCTTGA

>RXN00720-upstream

CTGATCTATACGTCTCTGTTGAAGTAGAGAAGCTTTCTGGTCAAGTTCCTTGAGTATGGTG  
GTCGAAGACCAGCACTCCAGATTCAAGGAACCTATAAAAC

>RXN00720

ATGGCÀTCACCGCGCCGCCACAGGTTGCAGCACCACGCATCAAAGAACTTCGCCTAACA  
GGCCTTGACAACGCTGACCCTCAAGACATCGAATCGAATGAGCAGATAGAGTCATGCCGT  
TTTAAACGAGGCCGAGCTTTCCGAACGCGATCTTTCTGGTGCTGGTTTCATTGAATGTGAA  
TTCTTGGGCTGGAAGCACACGAAACCGAGCTACGCCGGGCTCAATTCGTGGAAACACGC  
ATCGAAAGAGCCAATGCTCCATCTTTTAAAGGCAGCCCGCTCCATCTGGCGCAACGCAACG  
ATTTCCGACTCCCGCTTTGGTGCCGTCGAAATGTATGAAGCAACCGTCCAAGCTTTGAAA  
ATCTCTGATTCTAAGCTGTCGTTTGTCAATCTGCGGGGTGCATCGTTACGGGATGTGCTC  
TTTGAGAACTGTGTCATCGACGAGCTTGATCTTGGCCAAGCCAGAGCAGAACGCATCGCT  
TTTAAAGACTGCACGGTGCATTCGCTCACCTTTGATCATGCCGTGCTCAGCAATGTGGAT  
CTTCGCGGTTTAGATATCGAGCGCATCAGTGGCGTGGAGTCCATGTCCGGAACCGTGATC  
TCATCCCTGCAGGCTGCTGACCTGTCGGGAGCATTTCACGGCATTTAGGAATTACTGTA

AACGAT

>RXN00720-downstream  
TAGAAATCCGCTCTTTTGAACAA

>RXN00722  
GCTGTTCTCCGAGAAGCCGGAGTTGTTGATGCCGGGGGACAGGGCCTAGTTATTCTCCTG  
GAGTCCCTGGCCGAACAAATCAACGGAACCCACCTCACCATCCATCGCACCACAGTGAA  
CCAGCCGAAGAACCCCTCTTCCACGGCAAACCGGCGACCTAGAAGTGATGTTTTACATT  
GCATGCGACTCCGCGCAAACACTCGATGCTCTCCACAACGAACCTGAAACACTAGGCGAC  
AGCCTGCTCATCGCCCGAGAAACCAATACCCGCGGCACCGTTCACATCCATTTCGCGCCGG  
GCAGGCGAGGTCATCCAAAAAGCATTGCGCGCAGGAGACGTCAGCGAACTCCGCCCTTGAA  
ATCCTCCCCGATACTTCCGGCAGCTTACGGAAGAACCACGCCGGGTCCCTCATGGCTGTC  
GCACCTGACGGCCTGGTGGCGGAGCTGTACCGCAGCGCTGGAGTGAAGGTGGTGGCCCGC  
AACATCGCGCAATCCAAGTCTGATGATGTGGTGGCAAAGATCGTTTCCATCGCGCGCAAG  
TCTGGTGGCGATGAGGTGATCTTGTGCTGCCAACGGTCTTTTGACCAAGCGTGAGCTGGTT  
TCCATTGAGCGTTCCAGCCATGCTTTTGAGCAAAGTGTTGTTATTTTGCCTACTGCCACG  
TTGGTTGCAGGTCTTGCAGCGGTGTCCGTTTCATGAGCCAGCGCAACCCCTGGCGGTGGAT  
TCCTATGCCATGGCAGAGGCCGCCGGTTCCATGCGCACGGCCACGATCCGCGCCGCCACC  
AGCGCCGCGCTCACCCAGGCCGGCGCATGCTCCAAGGGTGATCTATTAAGCTTCATCGGC  
CCGAGATAGCTCTGGTCTCCGAGGAGCTCAACGACGCGCTATCGCGCACCGCTTTAAGG  
CTTCTCGACGGCTCCAGCGAGCAAATTACCTTCTCATAGCGCAAGACCGTCAGTCCGCC  
TTCGACGAAGATGTTTTCCGCCGTGGCCTGGGAACCTCACACGGATGTGGAGATCACGGTC  
TATCCTGCTACTGGAATGGAGAATCTGGTAGAGATCGGAGTGAG

>RXN00722-downstream  
TAGCCACATGTTGGGTGGCATG

RXN00729-upstream  
TTCAGCACAGATCACCCTTTGCCAGCTACCGACTTAGTTTCGTAACACGTATAGTGGGAG  
GCGTTTTGCCAGACGCCAAAGAAAGATAATTGGATTACCT

>RXN00729  
ATGAGCGCCACCAACCCCTGATGCCCTAGACGTGCAGCACGTCTATCCCATCAAGACGAAA  
AAGACTCCACTTGCGGTGATTTTTCAACATCATTAGCGGTGGTTTGATTGGAATGGCGGAG  
TTGGTGCCAGGAATTTCCGGCGGAACTGTGCTTTGGTTCTTGGAATTTATGAGCGCGCA  
CTGCACAACGGTGATCTCCTCATTTGATCTGATCAAGGTGTTGATCAAGGACCGCTCGAAG  
GTTAAGGAAGCTGCGGCGAAAATCGACTGGTGGTTCTTCGCGCTATCGGCGTTGGCATG  
GTCGTGATGCTCTTCTCGATGTCTCATGATTTTGATACAGTTGTTGAGGACTACCCAGAG  
ATCACTCGCGGTCTGTTCCCTGGAATGGTTGCCGTGTCTATCCTTGTTCCGTTGGGAATG  
ATGGATATGCGGGATGCCAAGAAGCGCCTCGCAATCGTCATCCCGCTATTTATAATCTGC  
GCCATGCTGGGATTCCTTTGGAACATCCTTCACTAGTGCGCCTCGCACCGATCCTTCACTG  
ATCTTTGTCTTCATCTGTGCTGCGATCGCTGTGTGTGCTCTTGTTCCTTGGTGTTCAT  
GGATCATTTCTTCTTGCTGGCGGTGCGGTATGTACGCGCCAATCATGGAATCTCTGTCCAAC  
CGTGACTTGTTCGGTCATCGGCGGTGTTCTTGCTTGGCGCGCTCACCGGTGTGATCTTGT  
GTGAAGGTTTTGTCTTATGTTCTCGAGCACCACCGCACCATCACGCTGACCATCATGGCT  
GGTCTCATGCTGGGTTCACTTCGTGCGCTGTGGCCTTGGCAGGACGGTGACGCTAATCTA  
CTTGCTCCTGGCGATAACGCCGTGATGATTTTCAGCATCATCATTTCTTGGTGGCGCGATT  
GTGCTGCTTTGATGTTTGTGAGCGTGTGTCTTCCAAGAACATTGATTCTGAGACCGTG  
GCAGAAGAGCACCCGCGC

>RXN00729-downstream  
TAAATAAGAACTCCACAAAGAAA

>RXN00730-upstream  
TGGTGCAATAACCTTAAGTGAGGCTGGATTTTTCGTTGGCAGGCGCTCGGGTTTTGTTTT  
ATCCGGCATGGGCTCGGGAGGACTTTAAATAAACAGCT

>RXN00730

ATGTCGAGCCAACAAACGATCTTCATCATTTTGTCTTTTGCCGCGAGTGATTCTCATTTCC  
 ATAGTAATGATTACAGCTGCCTTCAAACCCGGAAGAGCGCTTTGCCGCGGGCTGAA  
 GGAATGGCCAACCTTACAATTCCTGCGCCAACGTGCGCGTGGCAGCGCTTCGCCGAGCA  
 CTTGCGAGCCTTGTACGCTAGGCCTGAATGGCACAAGACCCGCGGAGCGAAACGAGTGTAC  
 TCAGCTGAACAGACTTATTTTGGGT'TTGTCTCAGCAATGCCACTGGGGATGGTGCAAAAC  
 ATGCTGCAACAGACTGGGGTGTGAAAAAGTCTGAGCATGCAGTTGATCAGCTTTCATAA  
 GGAGTGGAAAGTGATCGTTGGGGTAGCCGAGGCAACTGGCGTAAAAACGGAGTATCACCC  
 GCACAAGTGGAAAGAGGCAGGCCAGCGTTAGCAGCTGAAGGATTGGCTCATCCACACTTT  
 GTTGTATTCCAAAAGCAGCTTCAACAGGCAGATCCAAATGCAGAATATGATCTCGATGTG  
 CTCGCATTTGATATCGCACGCGTAGCCAACCTCCTTCGCTGGGCTGCTTATACAGATCTG  
 TTGCTCCCTGCAGAAGCCCGTTGGTTCCAAGACCAGCTGGGAATTGCGGCTGCTGTGTCC  
 TTTGGGAGCTGGGAAGAATACGGAGAGCGATACGTCCGTGGACTACAGAAGAACTTCAAG  
 GGCGGAAACAAGCCATATATCGAAGGAGAACGCTGGCTCAACACTGAGGCTGAAAGTCCA  
 TGGAAGACCCAAAAGTGGATTAGCGCC

>RXN00730-downstream  
 TAACTGCTCATGAGCTAAGCGGC

>RXN00731-upstream  
 TTGATACCGTGGCCGGTGGACATTCTTCCAGGTGTGGCGCGTGGCTTTAGCGAATACTT  
 TTGATTGGGTTGCCAAGCGCGGCGGATTGCAGGTTTAAACA

>RXN00731  
 ATGAAAGACGCTTCACAGTCCTACTTATTATTCTGGTCTGAGATGGCTGGGCAGGTCCCTG  
 CGTTTCGCACCGTTAAGCCTGCTCATGATCGTTGTTCATGCGGGGTTTGAGGGAAGTGT  
 GGCGCCGAAGATCCCGCAAATAGCTCTTTGGTAGACAACCTTGGGCTCACCTGCCGTGG  
 TCTCTTAATGATCCGCATTTTCTCACCGCAGGGTTTAGCGCTTCCACCACCACAGCAGCG  
 CTCATGTCCACGTTGTGGATCATCGTGTGTTGCGGTGCCCTCTGAACGGATTCTGGGCAGC  
 CTCAAATTCGCGATCACAGCAGCGCTTATCCACATCACTTCCATTCCGCTGGGCATCGGC  
 ATCGCCACCTCATCGAAGAAGCCGATCTCAACCGCTGGGGCAACAACATGTGGCCGAT  
 GTGCTGCTCACCCAGATTTCTGGGTCTTCGGCGTCGCGCTTTCGCATCCGCTCCATG  
 CCACTGCTCTGGCGAGCGCACCCGATTGTTCTCTTTACTATCACCTTGACGCTGCTG  
 CTTTATACGGGCACGCTTGCCGACGTCACCATGCTCACCGCGACCATCATCGGCACCGTT  
 GCCGGCGAGTTGAACAGGCATCGGAAAACCCAGGTGGCCGCTGGCTTCCCGGTTCCCTC  
 ACCGTGCGTGAAGCGCGCATTATGACGGCCATTTTGGTCACTGCCGTAGCAGCAGGTCCA  
 GTGCTTGCTGCGCTTAATCCACTCACCCACGGCCCTTTTCCAGTGCAACGAAATTGATC  
 TGGCAGCCCCCTTGTCACCTGAAGAACACATGCATCACCTCTGCCACACAGACAGCACCTCT  
 GATGCATGCCAAGGTGCGCTTGATCAGCTCCAACAGCACGGTGTGGCCCTTCCGTTGCC  
 AACCTGATTCCTGATCCTCACCGTGGTCTTGGATGGGGCTTAGCCGCGGACGTCGA  
 CTTGCATGGATTTTGGCGGTTTGGGCCAGCTCATTTCCATCGCAGTGTTGATGTTCCAG  
 CTGACCAAACTATCGGCTGATTCCACCGATCTTCTATGGTCAGTCAATGCCTTTAGCGTG  
 ATCGTTCCCTGGCTGGTGGCGCTCGCCGTCTTGGTGTTTTCCCGCCGTGCATTCCAGGTG  
 AAGATTGATACCACCCGATTTCTAAATCCTTAGGCGCTCTCATGGTTACATGGTTGGCA  
 ACGGCAGCATTTGTGGATCCTTGCCACATTGTTCTGCCACACGCATTCCACCCACATCCA  
 ACATTGGGGCTGGCTTTCAAAGAACTCCCTTCCGCTATCTCCCACCAACTATCGAAACG  
 GTGTTAAGCCATCAACTCTTCCCCAGAAGCCCTGCTGGGTGGGCAGTGTTTGAATGGACT  
 GGAACGCTATTCTGGCTGGTCGTAGCAGCAACTCTTATCATCTGCTCATGGGTGTGCCC  
 AGCAACAAAGCGCACGAGGACCAAGAAAACGCGAGCTCTCCTGCGCTCTGGCAGCGGC  
 GATCACTTGCTCCTGGATGACCATTGGGGTGGCAATACGTATTGGTGGGCACAGAAAAT  
 GCAGGATATGTGGCCTACCGCGTGAAGAGGGGCATCGCAATTACATTGGGTGAGCCTATT  
 CTGGGTCCGGATTATCCGTCTCTAAAGCAGAGCTGGCCGCACAGTTTGAAGAATTTGCC  
 AGCAACCAAGGCTGGATTGTTGCGTGGTATTCCGTTTGTGAAGAATTCTCAAAGGAACGC  
 ATCAACGCTGGCCACCACACACTTCGTGTGGCTGAGGAAGCAGTCTTAAGCTCAGCTAAT  
 GCGGATTTCAAAGGTAAGCACTTCCAAAATGTCCGCACCGCCGAAACCGCGCGGCCAAA  
 GAGGGCGTAAGTTCCATCTGGACAACCTGGGCTGATTTGAGTGCCGAAATGCAGCACAAAG  
 ATCATCACGCTGTCCGAAGAATGGGTCTCTGATAAAGCTCTGCCGAGATGGGCTTCACG  
 CTTGGCACTGTCAACGAGCTCTCAGATCCAGATACCTTCTTCTCGCGATTGATGAG  
 GAAGAGCATCTGCACGGTGTGACAGTTGGTTGCCGCTATGAAAAAGGACGCATCGTC  
 GGCTACACACTTGATGTGATGCGCCGTGATCCGCAAGGCTTTAAATCTGTATCGAGTTT  
 CTCATTTCCGAGGCCGTCGTTATCGCAAGGGATCACGATCTGGAATGGATGTGATGTCC

GGCGCTCCTTTGAGTACGCCCCAGGTGTGGCCGACGACGGCACCATCGGACAAATTTTG  
GAGCTTTTGGGCGGAGCAATGGAGCCGTTCTACGGTTTCCGTTCCCTCGCTGCGTCCAAG  
AACAAATTCCACCCAGAACACCACGGTTGGTACTTGTGTTACCGCGATGAATTATCGTTA  
CCAAGCATTGGCCTTGCCGTTGCTGCCGTGCTACCTCAACGAGTTTCCGCTGCCGAATTGG  
CTGAAAAAGACCGCCACTTCCGCCCCAAGCCACAGC

>RXN00731-downstream  
TAGAAAAACGCGTAACCTTGGTG

>RXN00738  
TGTCAGAGGAGACGGATGGCTTTTTTGATTTTGGGCGCGATATGCGGCCCGGTGAGCGC  
CGGTCGTATGGCACTTTGCTTAACGACGCCACGACGCAGGTGTCGCACATCCTCGGCAAT  
GCCTTCACCCGATCTGGGCTCAACGCTGAGTACGCGAATCTTTATGGTCAGGCGTTGGTG  
GGCATGGTGTGCGATGACGGCGCAATGGTGGTTGGATGAGCGCACTCCGCCGAAGGAAGAA  
GTTGCCGCACATATTGTTAATCTTTGTTGGAATGGTTTGACGGGGATGGAAGCCGATCCG  
AAGTTAACTCCCATCAGTTCTGCTGAGGGTGCGATTTTTGGTCAAGAAAAGGAGAGTGAA  
GCG

>RXN00738-downstream  
TGACACCTATGCTCGCGGGGCTG

RXN00750-upstream  
TTTAAACAAAAGCGATAACAATGAACCGATGGTGTCTACGACAGAACCAGCTCCCCACC  
CACTAACACCCACCAGAAAATAACACCTCGACCGAACCT

>RXN00750  
ATGGACTGGTCGATCATTATTAATGTGCTTGCCGTTGCTACTGTGCTGATACTCACCCCTT  
ATCATCGCAGCTGCATTATATAGGGGT'TTCACACGCAACAAAATAAAAAAATTGAAGCT  
ATACGAGAAGCCCAGCAACACGAACGCGACAATCCCACTATCCGCATTGCTGATCTTCGC  
GGCATCATGGATACTCACCCTACATCTACACCGACGTCATGGTTACACGTGCACATGAA  
CTCATGATTACTGCACCCGCATTCTTTGATGTCACTCTCCCCGAAGCAGTGCTCTACGAA  
GATACTAAACGTGCTGCTCATGATGCCCTTAACGGCTATAAAGACACCACTGTCGCTAGT  
GCAGAGAAGATCATGCTTGATGATGCAGTCACCGCAGCATGGACTCTCTATTCCACAAAA  
GCAACACCCGGATCCACG

>RXN00750-downstream  
TGATCCGAGAGCCGAGTACCGCT

>RXN00762-upstream  
GATGCTGCGATGGTCACAAGTCGTTTTCTGGATTTTTCCACATCTATATCTTTACCCAC  
GTTCTTGCAAGAGATTCAAACCTGGGGCTAACCTGGGGAC

>RXN00762  
ATGAATACTTCCGATCGTATTAAGCACTCAAATCGCGCTGGATCGTGACCTCCGTGAG  
CAGGCACTATTGCTTTTGAAGGAGGTTTCGCGCAGTTGATGGCGTGATGCTTTATCAGAA  
CAATTTGTCCGTGGGCTTGCAGAACCCGGAATTGTTCACTCCCATTTAATAGTCACGCTC  
AATAGCGAGCTGTTGGCCTCGCGGCCGCGATGAGGAAACCACGGAACCTGGCTGTCCAC  
CCGGCGCACAGGCGTCAGGGAATCGGTAAGGCGCTTATCGACGCCGCCCCACCTCATCA  
ATCTGGGCGCATGGAATAACAGCAGGTGCACAAGCGTTGGCATCCACCCTGCGTATGAAG  
AAGACTCGCGAGCTTCTGGTGTGAGATTTCCGACAGGGCGCTCGATGACTCTGCAGCA  
TACAAAGATCCAGATGGAATTACACACAGTAGTTTGCGGAATGCCCTGTGGAGAAATCA  
GTAGCTGAGGCTAAATGGCTTCAATCCAACAACGAAGCATTCGACTGGCATCCCGAGCAG  
GGCGGATGGACAACTCATCGGTTGGGCGCAGGCTCAGAAAGCCGATTGGTACAAGGACTCT  
GACGTGTTATTCCCTGCGGACGGCGAAGAGATCGTTGGCTTCCACTGGGTAAAGCAGCAC  
AGTCCAGAATTACAAGAGATTTACGTAGTTGGCCTTCTTCAGCCTACCGTGGTTCGCGGC  
TTGGGAGATCCGCTTGTTCGCCTCGGACTGCATCACATGAGGGCTCATGGTGTCTCGAAAA  
GTGATTCTTTATGTGGAAGCTGGCAACACTCCGGCAGTCGCGGCATACGAAAAACTGGGA  
TTCATGTGCGGAAAGCCACGTAGTTTACGAAAAAG

>RXN00762-downstream  
TAAAAAAGAGACTTGCTAAAAAC

>RXN00768-upstream  
TCAAGCGCCATAACGCCTGATTATGCACGGTTAAGGCGCATCTCGCTCACTGGTGCTAAC  
CACTTGCGCTTTTGGGAAGGAATAACCCTTCCTGTCAGATT

>RXN00768  
GTGGGTACTATCGAAGACGTGGCTAACGAACAAATCGAGGTCGCGAACAACACTGATCAG  
ATTCTGTCAGGATACAAGTCCCCCTCTTCTTTCTAGAAGTGGTGC CGCAGAAGCGCAGGGC  
GCTGCTGCTCAAGCAGGTACTGAAGGTGTCGCGTGGCATTACGGTTCCCCCTCTCGTTCGAG  
CAACGCATCTTCGAAACTGGCACGGGCTTAGTTGACCGTTCTAATCGCAAGGTGATCAAA  
GTGCAAGGGCCTGATGCCCCACGTTCTCAATAATATTTGTCCCAAAGGTTGATTCC  
GTTGAAAACGGCTTTACTGCCGGTGCCCTGGATTGATGCGCAGGGTCGTATTCAACAC  
ACAATGCAGGTAACGTGTCGTCGATGGGGTTTTCTACCTCGACACGTCCGCGGCGGAGTTT  
GATACCTCATCGGTTTTCTTGACCAAGATGATTTTCTGGTCGGAAGTCACCGTCCAGGAA  
GCCGATCTGGCGATCATCACTCTGCTCGGCCAGGAAATGCCCCTCCGGACGCGGTCTTT  
GCCCCGTAGGGTCGATTGGAATGGGCCATCGCGTATCGACGTCGCCATCCGGCGTGAAAAC  
CTGGAGGAGGGCGTCGACAAGCTCTTAGAAGCTGGCGCAAAGCTCACCGGTCTCATGGCT  
TACACGGCCGAGCGCGTGAAGGCGTTGGAGCCCGCTGCGGGCGTGGATTGATGATAAG  
ACCATTCCTCATGAAATCCCCCATTTGGATTGGCCGTGGCGAACATTTAGGCGCTGTGCAT  
TTGACCAAGGGTTGCTACCGCGGGCAGGAAACTGTCGCGCGCGTTGATAATCTTGGGCGT  
TCCCCGCGCGTGTGTTCTGCTTCATCTTGACGGTTCCGCAACCGCTGGATCCTGTGACT  
GGCGCTGAAATCAAGGCCGGTGCGCGCACCGTTGGTCGTCTGGGCACCGTTGTCCATGAC  
GCCGATTACGGGCCGATCGCTCTCGGGCTGGTTAAGCGCAGCGCTTTGGATAAAGAACTT  
CACATCGATGATGCTCTGTAAACGTCGACCGCGATCTGCTTCCTGCGGAGGAAAGTGAA  
CAACGCGGACGCGCAGCGATCAATAAGCTCAAGGGTCTT

>RXN00768-downstream  
TAACTAAAACGATTTATAGCGAA

>RXN00769-upstream  
GGCTATTGTGTCTATCAGGAATACAGTTAATACATCTTGAAAAGCCCATGGGCCATCCGA  
ATTCCCAGGATCGGCCCGCTCACTCCAAGGGGGTCAGGCA

>RXN00769  
ATGGGTCGCGGTGCGCGAAGGCCAAAACAGACCAAAGTTGCTCGCCAGTTGAAGTACAGC  
TCTCCAGACATGGATCTCGATTGCTGCAGCGGGAGCTGGCTAACCAGTCTCCTAGGCGT  
TCCTACTCCGATACCCCTGATGATGAGGACCAGTACGCAGAGTATGCGGACTGGGATGAG  
GACGACACCGACAATCGTGCCTACGGCACAAAC

>RXN00769-downstream  
TGATTTTCGTGTGTCTTAACTCT

>RXN00771-upstream  
TACCCCTGTTTTGGAGAATGCTCCGAGCCAGGGGTACTTTTCTTTTCCTCACACACAGTA  
GCTGCTGAGAAAAATGAAGACCTTTTGTTAGGTTGGGAGT

>RXN00771  
ATGACCAACCCATACGAGGCCTTCATACCGCTCAAGCATCGTACGGGGATTGAACCCGAG  
CACACCTTTTGGGAATGGGAAAACAAAAGGGTTTACATTGCAAGGAGACGTCGAGAAGCG  
CCCGTCCGCGTTATCGTGGTGCATGGGCTAGGCACCCATAGTGGCGCCCTCTGGCCCCCTC  
GTCGCGGCCATTGAGGGCGCGGACCTCGCCGCGATCGACCTGCCTAAACTCCGCTTTAC  
GACGATTGGCTGCGCCTTTTAGAATCTTTCATCTCGTCCGAAGACGACGGTCCGGCACTC  
ATCTGATCGGTGCAGGCACCGAGGCTTGCTTTGCGCAGAAGCTGCACACCGCACAGGA  
CTGGTTCGCACACGTCAATTGCCACCTGCCTGCTCAACCCCTCCGACCAGCCGACGCGCCGG  
GCACTGTTTCAGGTTTTTACCCTGACTCGGTTGATCCAAGGCCGCTTGCGCAACCGCGAA  
ATTCCCGTGACCAGAGTGTTGAACCTCAGCAAAATCAGCCGACGCCAGCCCTGAGCAAA

TTGTGCGCGGCCGATGAATTTAGCGGAGCATCCAAAATAACCTGGGGTTTCTCGCGTCA  
TATGTGCAACACAAGGCCAACTGGGTGCAGTTCCCGTCACTCTGATGCACCCTGACCAC  
GACCTTCTGACTCCCGTTGAGCTCAGTCTGCGTACGCTTTCGCGCCTCAAAGCGCCCACT  
GACGTGGTTATGCTCAAGGACTGCGGGCATTTCCTCATCGAAGAACCCGGCTTCACCACC  
ATGCTCGAAACCGTCACATCAGTTATCGCGCGGAATAGT

>RXN00771-downstream  
TAGCGGGCGCATGTGGTTGGGAT

>RXN00785  
ATCATCGCTACTCTCGGTGTGACCTTGCTGGTTGAGGCCCGCGGATTATTCTTGACGGTT  
GCGTCCATTCCCATTTCTGTTTGGTATTTTCACACCACTGACTTCGTGGTTTGTGTCCCAA  
CAAGGCGTGGCTGCGAATGTGTCCCTGGTGTTCCTGTCACGGAAATCCTCACGGCTGTT  
TATCCTTTGGCGCAGTTGTTCCTCCACCTGATCATGGTCACTTTGGTGCGCGCATTGATC  
GCTGTGGTGGGATTATTCTGCTGCGCAGGAACAGGAATCTCGTCAGGTTTCTGGGGAA  
CTTACCCGGCGCGCGCAGCGTGAGGCTGAGGAAGCTAATCAGAATGCTGCTCGTCTGCT  
CGCGCACAGAGCACGAGGGTACAAAGTTCTAAACACGTAACCGTCGCGCGCAACCAACC  
GGCGATACCGGTTTACAAGTCACGGTTGATGAGTTGATCAGGCGTAGCCAGGAGCGCCGG  
CAAACCTGTTGCGCAGCGCCAACTGAGCGCGGTGTGCCGTTTACTCCAACCTCCGGGTCT  
GTGGTGGCCCCCAAGCCGCGCCCGAGCGCCCTGAGGCGCCGGCTCCTACGGATGTGGGT  
GAGCGTCGACAAGCAGCCCCCTAAACGCCGCACCTCGCTCGACGATGATCTGTACAGC

>RXN00785-downstream  
TAAAAAATCCCCGCTCATGTGGC

RXN00795-upstream  
TTTGGATTCTGGACACCCAAAAGGGGGTTTCGTACCAAACCTCGTGACATACTAGGCGGGT  
GGCTGAGAAACGACCGAAAATTTTGTGATGGCAGTCGAGAC

>RXN00795  
ATGATTATCTCGTTGGTAGTCTCCGCGATCATCATGTTGGTAGCGGTGGGATTACGGGA  
ATGTGTTCTTTCAATACAGGATCCCTGAAAATGGGCAGGTACCTGAAGTTGATGCTTCC  
ACTTTTATGTCAATGGAAGCGCGCGCAATGACTGATCATGCAACTAGGTTGCCGAAACT  
CCTGAAGGCTGGACCACAAATTCAGCTCGACGCACCATGGTGGATGACACCCCGGCATCT  
GTAGTTGGATATGTCACCGCAGATGAGGGCTATATTCAGCTCACTCAAACCTGGTGAAC  
GTTGAGGATGCTGTGGCTGGTTATGATACTCGCTGGCGTGATCTTCTGAGTCTTATGAT  
CTTGATGGCCACGACGTGGGAATTTACACCTCACAGGAATCTGATGTGCGTGATCTGCGT  
GTGATGGATCTGGGCGATGCCCGCGTCATGGTCTCGGGTGCTGCTACCGATGAAGAATTC  
AATGATCTGCTTCGCGCAGTTGCGAATTCGGAGCCACTGCCTACCAAT

>RXN00795-downstream  
TAAGAATTGGTCTGAACCACCAAA

>RXN00831-upstream  
AGCTCCAAGAAAGTCAGTGCTGTGCATGGCTCGGTGCTGCTCATGCTTTTCGGTGTTTAC  
ATGATGAGCATGTTTCGCTGATTTAGGTAGCCTGGTGGGA

>RXN00831  
ATGAGTGCACTTGAGACATTGCAATGGCAGGACTGGTCAAGCGTCTTAATTGTGGTAGCT  
CACCCAGATGATCCGGAGTATGGGCTTTCCGCGGCTGTTAAAGAATGGACAGACGCCGGG  
GTGGAGGTGTCTTACCTGCTGCTCACCCACGGGAGGCAGGTATCCAAGGTTTAGACCTT  
AAAGAAACCGGGTCATTGCGCGCAGCGGAACAGCGGGCTGCATGTGATGTGGTAGGAGTT  
AGAAATCTCACCATTTTGAATCACCCAGATTCCATGTTGGTGTACAATCTGGTACTGCGC  
AAAGATATTGCTCGGGAATCCGGATCCGTAAACCAATGCTGTGGTGGTATCCAATTTT  
GATGTAGAGGCTTACGGTGGTTTGAACCAGGCGGATCACCGCGTGCGGGGATTAGCCGCA  
ATTGATGCGACCCGCGATGCCGCTAATCCGTGGGCGCAGCCAGAGCTGTTGCAGGAGGAT  
CTGCAGCCGTGGGGAGCTGAAGTCATCATCATTTGCCGACACCCAGAGCCCACCCACACC  
ATGGATCTGGCTAAAGATTCTGTTGATGCCGAGTTGCATCCCTTCAAGCTCACAAGGAA  
TACTTGGCCGCTCTTCCAGATCCCCGAAGCCGGAGGAGTTCATTCCGGCGTTTCTCGAG  
GTAGAGGGCGGTTACGCAGCGGCCTTCCGAGTTTTCGGACGG



>RXN00831-downstream  
TAAGCAGGGCGATACGTGATAGG

>RXN00835-upstream  
ACTGCACCAGCGCCAACGATCGCAATTTTCATACCTGCTATCTTGCC TGAGCACAGATAA  
GATTTGTAAGCACTACCCCTTCTCTACAAAGGAGTCATCA

>RXN00835  
ATGGCCGGTGGATTGGCAGCACTATTAGACGATGTCGCAGCAATTACTCGAGCGGCTGCA  
GCCAGCCTCGATGATGTCACGGCGATGGCTGGAAAAACCAGCGTTAAAGCCGCAGGCGTG  
GTTGTAGATGACACGGCAGTTACCCCGCAATATGTTCAAGGTGTCAAACCTGCACGCGAA  
CTGCCCATGATTTGGCGGATCGCTAAGGGCTCTTTGGTAAACAAGATCATCATCATTTTG  
CCCATCGCGTTGCTTCTTTCCGCGTTTGCTCCGTGGGCTCTCACACCAATTTTGATGCTG  
GGCGGCTCCTACCTGTGCTTCGAAGGTGCAGAAAAAGATCTGGCACTCCCTCCACAGGCGC  
ATCAAAGGTGAACAGCACAGCACCGAACCAAGTCGCAGGAAAGCCCAAAGTCAGAGGAT  
CAGCTGGTCAAAAGTGCCATCACAACCTGACCTCATCCTTTCCGCAGAGATCATGGTTATT  
TCACTCAATCAGATTGCAGATCAAACCTATCTGGATGCAGGCTGCGGTTCTTTTCGTCGTA  
GGTATTGGCATCACCGCGCTCGTGTACGGCGTAGTCGGTGTTCTTGTGAAAATGGATGAC  
GTCCGACTTACACTTTCAAAGCGTGACTCCGCAGGTATCCAGAAATTTGGCCGCGGCTTG  
GTCAAAGCGATGCCCATCGTTCTTCAAGTTATTTCTGTGTGTCGGCGTTTTTGCCATGCTG  
TGGGTTGGTGGCCACATCATGGTCGTTGGAACGAAGAGTTAGGATGGGAACCTCCCTAC  
CACCTTGTTCACGGACTAGAGTCTGGGCTAACCGGTATCGGAGGCGAGTGTCTGGGATGG  
GTTGGCAATACTTTCCGGGTCACTTGTGTTTCGGCCTCATTTGGGGCGCGATTATCACCGTT  
GTGGTCAGTGTGATCAAGAAGTTCATTCCACAGCGTGCAGCAAACTCGTCTCAT

>RXN00835-downstream  
TAGTGGAGAGTTGTTTCGCTGTAA

>RXN00836-upstream  
GGAGAGTTGTTTCGCTGTAAATTTTCGCTGTACAGTTAATATGACTTTTTACTGTCTCAATCA  
ATTCACAAGTTTGCACGAAATTTAAGGAAAGGAGTGCCCA

>RXN00836  
ATGTATACCCATTCAACAGGCACTCCTCAGCTTGATTTTCGACGGTGACATCTATCCCCTT  
CACCTCTTCTTCTGTCACAGACTGCCCAACATTTTCGCTCTCGAGCGCGTCAATTGGCAT  
GTCTTACGCGCTATTGTGAAACCTGAGCAAGGCGAACTCATCGTCAAGCGCTTCTCGCA  
CCAATAGAAATCCGCAACAAAAATCGGTGTTTGGGTTCAAGATGAATTTCTCGGGGTGATT  
GCAGAGTCCCAGTTCTGTGAATTCTCAATTGTCTCGAATTTTTGCCTCTGGCCACCTG  
ATTTCCAGCCAACTACTTCTCACACCGAGTAAAGGATCTCTCGCTTCAGTTCTTCTTCCA  
AACCTAAAATTCGGGCTCATCAGCAATGATCCTCCACGAGCTGATTCCACCTCTTACCG  
CTAGGCAGAATGTGGCGCGTTGAGCCACCGTTCATGCTCTGTTTGAGGATTTCTCACTT  
GGCTCCACGATTCTTTTTGGGCTGAGGCTTGATTTAGAAGCCCTAATTGTCTCCTATAAC  
GGAATAGAAATGTGGCATCTTAACTTTGATGACGCCCTCAGCACTAAGCTCTGCTGTGAAA  
TTCTCAAATGCAAATGGTCTCACCCCCACGGTGCTCGGCCACGTAGTCCGGGAGAACGGT  
GAAACATCCTTCGAGATTGACGTTCTCCCACTGGAGTTGTGGTCAAGAAGCAGCATCGC  
CTTGAGGTTTTTAAAAATCCCTCGGTTGATACCTAAAGAGGCGAGATTCCCAAAATTATGTG  
AAGGCGACAGCGCTCCTTTTCAGACGAGATTCTGCGACCACAAACGCTGTCCAAAAAGGCA  
CTGTCTTTTGTGCGACACCGCAGTTAAGTACAGCCCTCATGTTGCTTGTGGCGTGGGGATG  
TTTAGTCTTTTCGCCGTTATTCCCTTTGACAAGTTGAGTGATCATAGTGCGATGCTGCTC  
GCAGTCATTAGCTTGATGCTTTTTGTGCTGGCATTAGTAATTCTTTTCAAGAGAATTCAG  
TCAACTAATACTCAGCGTTGGAACCTGGCCTCGTCAGTCGGATTACTCGCGACACTTCCG  
ATTATCATATTTCCTGGTTGCTGATACATTGATTCCTCAGGGCAGCCTGGAAAACCATGCT  
CAACCCGACGTACAGGTAACAACGTTAGCTAACAGGCGGCCAAGTTACCTACCTCACTG  
GACTCACTAGGCGCATGAATTCACCAAGTTCGCCGAATTCCCCGAGCTCATCAATGCTG  
CAAAACTCTGAAATGTTTCGCCTCACCAACCGATCGCCTCTGGGCGAGTACCGGTTTCGACG  
TTCCGCTCATGGCTAGATCGATCCATTCTGCCACTCACACGAGAAAATTCCGCTTCAGAA  
AGCGCAGTGACAGCTCTTGGACCGTCGATAGTGCAGCCTGCATCTGAATCGATTACAAC  
CCAGCTCAAACGTCGCAAAGTCGCCACGCAATTGACGATGGTGACGACAGTAAAACCTCA

ACGGGAAGACCAGCTCCCACTACTAACTCGCCGATCATTGCTCTTCCCCAACGTGGATT  
ATCGGGCCGGAAGATCCAGAATCCACCGACCTTACAGCACCAACCGAGCCCACCGAGCCA  
AGCGAACCTGTGCAACCGACGAACCTCAGAGACCTCTGAACAACTTCACCTCTCTTA  
GCTCGCGACACCCCGAACTGAACCGGAAACAACCTG

>RXN00840-upstream

GCATTAAATGTGACAGGAGGAAAAAGTAACTGAAGTTACTAATGTGACTAAAGTTGT  
TCCCTCCGATTGTCTCGTTGAAAGGTAAGTAAACTCAA

>RXN00840

GTGACAAAGACACTCCCCGACTGCTTACAGTCGCTGCCGCTCTAGCCATTGCACTCCCCG  
GCAACCCCGGTAGCATCGGCTGTACACACAGTTGAACAAGCTTTCAACGCCTCATCGAAT  
CTCTCCAGCGGTCTCCCCGTAGACCAATGGGGACGCCCCAACGAGCAGTTCCGCCAACAA  
ATCGAACAGGCAGTAAACCAACCGTGGGTCCCGCAGGAAATCAAGAACATCGTTTCTCAG  
GCCATGGGTTTTATCACCGGTGACGGCAGCGAAGGTGGGGACATTGAAATCCCCGACAAC  
GCACCACGCATCGCGCAGTTCTTCTGGCCACCCGATCAGAAAACGTCATCAACGGAAAT  
TCTGCAGCCGTAGGATCTGCCTTCGCAGTTCCAGGACCAGCAGATCTCCCCCTCCCCGGC  
GCAGGTGTGGCCAAACCTCCTTCGTGTTACCGCAGTGGGAACTGGCCCCCTCGCAGAA  
CAGCAAAGCACCGCAATGACTGTTCAATGGGCAAACCTTAAGCAACTTCACCCATGGCACC  
ACGACGTTGAGCAACACCGGAATCAACCCGATGGCCCCCTCAACGATTTCCGGTGTGGCA  
GACACAGGACGCGGCATCATCGTCCCTCCATGTCAGGCGGCCTCACCACATCCACCGAA  
AACGGTTCAGCGAACTGTAATTCATCCCGACTGCCGTCGTATTCGATGTGAGG

>RXN00840-downstream

TAAGAAAACAATGACTGATCTTC

>RXN00841-upstream

GCCTCCATGTGAGGCGGCTCACCACATCCACCGAAAACGGTTCAGCGAACTGTAATTC  
ATCCCGACTGCCGTCGTATTCGATGTGAGGTAAGAAAACA

>RXN00841

ATGACTGATCTTCATCCCGTAAAGCAGGAAATTTTCAACACTGCTGAATCCATAAACACA  
GATCCCAAGGGGTTTCTCCGCGAGGTAGACACCTTCAAAGTAACCGACTTCGGCCTGTAC  
ATGGCTCGTGGTGCAAAACACCCCAAGTTCGGATACTTGGAAAGCTGGCTCCTCCCAGAA  
CTTGGATTGCGTGCCAACATTTTCCACTTCCGCAAAGGCGTGATGAACGTCAGGATTAC  
TACATCGATGTGCTGAAATTCGCGTCGAAGACAACATCTGGACCACCCGCGACCTCTAC  
GTGGATCTCATCTGTCTGCGGAGAACCAGTAACAGTCATGGACATCGACGAACTAGCT  
GCAGCAACCTCAGCAGGGCTTATCACTGCAGATGACGCTGAGCGCGCAATTGATGCCACC  
TTGAATGCTGTTGAAGGAATCACCCGCCACGGCGACGATCCTATGCAGTGGCTGCGCTCC  
AAGGGAATCGAACTCACCTGGGCTGACGCCAGCCAGGTAGAGCTCGTCCCTGCAGAG

>RXN00841-downstream

TAACTACTTCCTAACCGCTGCTT

RXN00846-upstream

CTGCGGGAGACTCGGTTAGAAGCGAAAAATAACGGTATCCTCGGGGCTGCGGATGGCTGG  
CCTGGGGGAATTTCAAGTGCTGCAAGTTGGAGGAAAAACG

>RXN00846

ATGTTGAAGAATGATCTGTCTGGTGCTCGAGTTGTAGCTGTGCATGCGCACCCCTGACGAT  
GAGGCGATTACCACCGGTGGTGTGCTTGCGGATCTTGCTGCTCGTGGCGCCGATGTCACG  
GTAATTACCTGCACGTTGGGCGAGCAGGGTGAGGTTATCGGTGAGACATTGCGCGAGCTA  
GTCAACGGTGATGCGGATCAGCTTGGCGGGTTTAGGATCCATGAGCTTTACGCCTCGCTG  
GAGATTCTGGGCGTGCCTGGCATTATCTGGGTGGCGCTGGCTGCTGGAGGGATTCCGGT  
ATGGTTGGTGATCTGCAAATGAGCATCCGCGTGCGTTTATTCACCTCTGGTGACCGTGCA  
GTGGAGCAATTGAAAGAACTTCTTGCGGAATTGAAGCCACATCTTTTGATCACCTATGGC  
CCTGACGGCGGCTATGGGCACCCCGATCACATTGCTGCGCATGAAATCACCCACGCAGCA  
GCCGCGAGCAACGCATTCTGTGGGCTGTGAGCGACCGTGAGGAGCTCGAGGACGGTCTA

AAGGCAATCACTGGGCTTCCTGAAGGTTGGGGCAGGGGAGAGCTCTCTGCGGTCGATTCC  
GTGGACCTCTCTGTTGAGCTGAACGATGAAGTGTATGCCACCAAGGTGGAATCCATGCGC  
GCGCATGCGACACAATTGTGGATCGCTGACGGTTCCGTATCTCGCACCAACCCGGTTGCC  
GCACACGCAGTGACACAGCAGGACAATGTGAAGGTGTGGGCGCTATCTAATTTGATTGCA  
CAACCCATCATGCGCCACGAGCACTACCAACTCGGCGCCGGAACACCACTGCCTGAAGGT  
GCAACTGGAGTGCTTGACGGACTGGAGTTC

>RXN00846-downstream  
TGACACGGTTATGGCAGAATCTA

RXN00850-upstream  
GGCAGTTGTGCCGGTATACGTGGCGTCATGGATAATGATCGCATAAATGAATACAGCGAA  
ATTACCTGTTTCAGATATTTAGGAAGGCTCACTTTTCAAC

>RXN00850  
ATGGCTAATCCATTCTCCAAGGCATGGAAGTACCTCATGGCGTTGTTGACTCCAAGATT  
GAGGAGAACGCGGATCCTAAGGTACAGATCCAGCAAGCCATCGAAGATGCTCAGCGCCAG  
CATCAGGAGCTCTCCAGCAGGCAGCAGCTGTTATTGGTAACCAGCGTCAGCTTGAAATG  
CAGCTGAACCGCCGTCTGGCTGAAATTGAGAAGCTGCAGGGCAACACCCGCCAGGCTATC  
CAGCTGGCTGACAAGGCTCGCGCTGACGGTGATGTCAAGAAGGCTACTGAGTACGAAAAC  
GCCGCTGAGGCTTTGCTGCACAGCTGGTTACTGCTGAGCAGTCCGTTGAAGATACCAAG  
CAGCTCCACGACAGGCTCTGCAGCAGGCTGATCAGGCTAAGAAGGCTGTGGAGCGTAAC  
TCCATGGCTTTGCAGCAGAAGTTGCTGAGCGCACCAAGCTTCTGAGCCAGCTGGAGCAG  
GCGAAGATGCAGGAAAAGGTTTCCGAGTCCCTGAAGTCCATGGATTCTTTGACCTCCGGC  
AGCACTCCTAACCTGGATCAAGTTTCGTGAGAAGATTGAGCGTCGTTACGTAACGCGCTT  
GGCCAGGCTGAGCTTGCGTCCAACCTCTGTTGAGGGCCGCATGGCTGAGGTTGAGCAGGCT  
GGCGTTTCAGATGGCTGGACACTCCCGCCTTGAGCAGATCCGCGCTGAGATGGCTGGTGGT  
TCCCTGACCGCTGGTAACAAGCAGGAGTCCATTGAGGCTCCTGCAGCGGGCAACAACGTC  
ACTGATGACGCAGTTGCACAGCGCATGCGTGAGCTGCGCGGCGAGGCT

>RXN00850-downstream  
TAAACCTGCCACAGCAGACTAAA

>RXN00854-upstream  
TTCATCCGCCCTGGAAGACGGTCATGACGGGGACCCTTCTTAGGGTCGCTGTCGGAGATT  
GGACACGTAACTTCTGTGCTTGCGCTGTATTATCGTCCCC

>RXN00854  
ATGCGTTTATCGGAGTTTCGGCAACTCATTGAAGATGAATTCGGAGAAGCCAAAGGGGAG  
TGGATTGCACACTCGCATGTGATTGGTGCCCTCGGCGTCACTGCAGATGTTGCAGTAGAT  
ACCGGGGTTGATCTGCGCGATGTATGGGAACAACGTGCATTGATTTCACTGTTCCCGAA  
GAGCGACGACTTGGTAAAGATGAACCAGGGTTC

>RXN00854-downstream  
TAGCTTGTTGAGGGGGTTCGCA

>RXN00855-upstream  
TAAAAACCTCTCGACGGACGAAGCGCCACAAAAGCAAGAGAAGAATATAAGTGAACCAAA  
TTCCGTTTAGTGATAGTCTAGACGCCTAAACTTACCTGTT

>RXN00855  
ATGACTTATTTTGCCGTGCTTTACACATACAACCCAGACAGCGAGAAAGTCGCTGAAGTT  
CGTACCGTCCACCGCGAGTTTATTGCCAACCTTCATGCGGAGGGCAAAATCGTTGGCTCC  
GGTCCTTTTCGTGGACGGCGACGGTGGCGCGCTGATTGTCATCAAGTTGGAAGAAGGCTCC  
AACCTTGTTGATGCTGAAACCCTGATGAACAATGATCCATTCCACGTAGAAACGTGCTG  
GACAACCGCGTCATCCGTAGCTGGAACCCTGTGACCAAAGATTTT

>RXN00855-downstream

TAGGCAACTTTTTCTTTAACAAT

>RXN00869-upstream

GCCAACACCGCGGGTGGCGTTGTGGCGTCCCGTCTTGAATGCTCCACCGCAATGCCTACT  
ACCGATGAGGTGGAAGCCTCCCTCAACCAGAAAGTCTGAT

>RXN00869

ATGACTCCTCCGATTATCTCCCCAGAGAGCTTTGAAGCCCTAAGGCGGATGCGTGGCGCT  
GAACCCACGATGGTGGCGGAACGTTTCAAGCAGCGCCGTAAGCGTGAAGTCTCGGTGAG  
GACGGCAAGCTGTTTATCGTGGCTGCCGACCACCCAGCGCGCGGCGCACTTGCTGTTGGC  
GACAATGAAACCGCCATGGCTAACCGCTATGAAGTCTCGAACGCATGGCTATCGCACTG  
TCTCGCCCGGGTGTGGATGGTGTGCTGGGAACCTCCAGACATCATTGATGATCTGGCGGCG  
CTCGGACTGCTCGATGACAAGATCGTGGTTGGCTCCATGAACCGTGGTGGCTGGCTGGC  
GCTTCTCTTTGAAATGGATGATCGCTACACCGGCTACAACGTGTCTCTCCATGGTTGATCGT  
GGCGTGGATTTTCGCGAAAACCTTAGTGCGCATCAACTTGAGCGACGCCGGAACCGCCCCG  
ACCTTGGAAGCCACCGCGCATGCAGTCAATGAGGCTGCAGCAGCACAGCTGCCCATCATG  
CTCGAGCCGTTTCATGAGTAACTGGGTAAACGGCAAGGTGGTCAATGATCTTCCACCGAT  
GCAGTTATCCAATCTGTCGCCATGCTGCTGGTCTGGGCAATGATTCTTCTTATACCTGG  
ATGAAGCTTCCAGTGGTGGAGGAGATGGAGCGCGTCATGGAATCCACCACCATGCCAACC  
CTGTTGTTGGGCGGCGAAGGCGGCAACGATCCAGATGCCACCTTCGCATCCTGGGAGCAT  
GCACTCACCTGCGCGGTGTGCGTGGCTGACCGTGGGACGCACTCTGCTGTATCCGCAA  
GACGGCGATGTGCGCGCCGCTGTGATACCGCAGCGCGACTTGTTTCACACAGATATTCAA  
CAATTCACCTTCGACAGACATT

>RXN00869-downstream

TAAGGAATTTACACACATGTCTG

RXN00915-upstream

CTTGGCTGCAGGTCCACCATCAGCACAGGTCTTTGACATGAACGTAGCTCGCCGCGACGT  
TTCTTCAGGACCTTCTCTACCTGGTGAAGGTGAGTTCTAA

>RXN00915

ATGTCCGCCGCTATTCGCAGGACACCATTTTGACGGTGTCTTCTGGGGAGGGGTCTGACC  
GCTGAAGGGATCCGACAGACCCCTAGAAGACTTCGCAGAAACCGGCCCTAGTCCGCAACCTG  
GTGTGGATTGATGCCGATAGTTTCCACGAGTCTTCATCTGAAGTCACCCACTTGGCAACC  
AACCAAGACGGTCTTCCGGAGCTTCAGCGACGACCTTTCAATGAGTTGGTGTCCCGGTCA  
CGAACCACCAAGCTTCACATCGGTGTTCATCAACGTCAATGATGGCAGCGAAGGCATGCTT  
CATCGAGAAGAACAACCATTTGGTTGGGATCATCGACAGTGTCTGTTTCACACCACCAA  
ATTACCGATCCCAACGTGATGATCGGTGCGGTGGCTGCCACACTTGATGAGGAACCTCCA  
ATTCTTCGTGGTTATGTGAACCTGATGCTGGCACCTGAAGATAGCCACAGCCCAGGCACC  
GCAACAGTGACCTACCGTCATGGTTTCAGCGATCACCGTTTACCCTGCACGTGCGTGGCTA  
ATATCGCCAGCTTGTACGGACTGTGGGAAGGCAGCACATCCACACCAATCGAACAGCTCG  
TACCTGCGAAAGGTTCCAGCTTTTCGTTTGG

>RXN00915-downstream

TGAGGTCTTTTACAGGCGAATT

>RXN00917-upstream

TGCCGTGGAAGAAAGCGCTCTTTACTGCGACAGCCGTCCTATTGGTGTGTTGCTGTTGTGT  
GGTCGGCCTTGGATATTGCCCTGTGGGTAGGAAAGCAGTC

>RXN00917

ATGGTGAACACGTTGAACCTCTAAAACCGTGAATGTACCCCGTTTTGCCAGAGGCGTTGTT  
GCTGCAGCCACAGCGCTATTTTTTGGCGCTTTGGTAAGCCTCGCGCCTAGTGCCTTGGCG  
CAGGAACCACCTGCAGTTGAGGCCGGAGCGTCAGGTCTTTGAGCAACCTGGGTGCCTGC  
ATCGCTGATAAAGGCATCTTGATGTTCATCATCATGATCGATGAGACAGAATCCTTGATC  
CATGAAGCTCGTGACGCGGTGGTCAACGCCAATGAACCAGGCGCGGACGCACAGCACACC  
CGTGTTCCTGCAGCACAGAGCTTTGTGGATGAGCTTCTAGCCAAGCAAAGCGATGGTGAT  
CTGAACACCCGCATCCGTGTTGCTGGTTTCGGCCAGACGTACAAATCTGGTGCCACTGAT  
CCAGACAATTACGGAGCATGGACGCAACTAGATGCCTCCACCGTTGGCGGAGTACAAGAT

GAAATCTCCCGCTTCGCTGACCGCACCCAGGAGCAGTACACCAACTACGCCTCCGCGATT  
 GAGGGCGCTTACCAGGACTTCAC'TAGGTCCGGCTCTGAGGACGCCTGCCGCATGCTGGTG  
 ACCTTCACCGACGGCGCACTGACCGCTCAAGAAGGCGCCGATGTTGCAGAAGCAGCACTG  
 TGCGCGCCGGGTGGCGTCACCGATCGACTGCGCAGTGCTGGCATCACCCACATCGGCATC  
 GGTTTATCGGCACCTACCAACCCATCTGATTTTACGCTGCTGCGCGGAACCAACGCAGGT  
 GGCGGAACATGTGGTGTCTGAACAGCTAACGGTGCATTCTTCCCAGCAGATAACGTGGGC  
 GGACTTTTTCGCAGCATTTCCGTGAAGCCCTTTCGATTGGTGGTGAAACAATTGGTGAAACC  
 CGAGCTGGTGATCCTTTTACGCTTACCCCTGGACAACCTCGGTGAACTCTGTGCGTTTACCC  
 GCGATCGCCAAGGATGATCTCGGCCCGAACGCCCACTTGGTGCTCACCGCACCCAACGGC  
 GAAACGGTTGAGCTCAAAGATTCTGGAAGCAGCGTCGCCAACAGCACTGACGTGAGTTGG  
 GAAGCCGAAAGCAGCCCCAGTAAAAATGGCTGATGGTTCCCTCAACCTGCAGCAAGGTGGG  
 GATTGGAAGGGTGTCTGGCAGATTCAAGTTCGAAGGAATTGATCCTGCAGCGGTTGATGGA  
 CGCGTATTCAACTCAGTGGAGATCCAGCCTGACCTCCAGCTTGTGTTTCACTGGCGGTGAT  
 TCGACGTCAAGTGCATTAACCTTCGCGATGATCAGCAGCTGAATATGCAGCTGGTGGGC  
 CGTGATGGTCAGCCACGCATCCTTGAGGGGTCCGCGCTGGTTCGATCTTGGTTTACCCGC  
 GCAGATACCGGCGAGTTCGCCCTTTGGCTCAAGGAATTGATATTTCTGGCGGCGAATTA  
 AGCTTCCCGCTGGATACGATTTTCGCAGCTCCCAGCCATCGGCACGGTGGAAGCGCGTACC  
 ACGATCACCAACCGCAGGCGTCGATGATCTCCCCGGCACCACTTGAGCCCAATTCCTCAAC  
 ACCACGCGCATCACCATCACTCAGCGCGATATGCCTCAGCTGCCAGCGTCGGTTTCGCTTC  
 ACAGCGGATGAGGACGTTGTTACCGTAGACATCCCCATCACCGGCCCGGCAAGGTATGG  
 ATTGACACCGGGAACCCAGCTCAGCGGAGTGCTTCCAGACGGCGTGACGGCATTCAGCA  
 TCAAGTACTTTTCGACAGCCAGATAATGCTTTGGTGCTCGGACTGGATGAGCAGGGCAGC  
 ATTCTGTGTGAACCTAACCGTGAGCGATCTTCGTGACGGACTGGTCAACGGCTCGATTCCA  
 CTCCAGATCTCCAACGCTGAGGGCGCCAATGAAACCAGCGTGGATCTGCCGACAGAAGGC  
 ACGTTGAGCGTTCCCATTAACGCCCTCCACTTTTCGATTGGCATTCATTTTGGCCCTTGTG  
 CTTTCCCTCCTGATTCCGCTGCTCATTTTGTATATTGTGCGTTTCCCTCTCCGCAAAGGTT  
 CCGTCCCTCTGCGATGAGTGGCGTGCGCATTCAGTGGAATTCTCCGGTGAAGCTCTGCGC  
 TATGCGGGCAGCACTATGCCTGATCTCGCATCGCAAACCAACCGCCACCAAGCAGGTGCTT  
 GTTCATGGAGACACCTTCAATGTGGAAGGCCACAACTTAAAGTCCAGCGCTTCCAGCTG  
 AACCCGATTGCGTCTCCTGCACTGATCGTCAGACCGACCCGTCGATCAGCTTCGACGGC  
 AAACAAAGGGCACACAAGCTAAACTCCCGCTGGCGGTCCAAGGCAGTTGGTTCTCTCACT  
 GCAAGCGGCGCTGACCTTCCAAGATGGAACCTCATCGCCCTGACAAACCTGCCGCTCGAG  
 CAGGGCCAAATCGACCGCATGATCGCAGGTATCACAGCAAAGCCCCGTGATAGGGCACGC  
 GAACTACAAAATTTGCTTGACGACGCCGCGACCTCCAGCCCCGAAAGGTTCCACCGCGC  
 GCCCCAGCCGCGCAGGGCCACGTGAAAAGCAAGCTCCTAGTTTGGGCACTGGTTCCGGT  
 GGTGGTTTCGGCTCCAGCAATGGTGGAGGCTTTGGCTCCGGTAGCGGATCCAACGACACA  
 AATGGTGGATTGGTTCCAGCGCGGCTTCGGCGCGCGA

>RXN00917-downstream  
 TAACCTGTAACCTGCGATTAAAA

>RXN00921  
 CCTGCGGCAATCCTCTTGGACCATATCGTTCCGAACTTCAGCAGAGATCGGTCTTTGCCA  
 GACATCGAAGACTGGACGAGAAGCGATGAAGCTCAGCAGATCTTTGCAGGAATCATTTGCC  
 GGTGCGTCTGTTCAAACCTGGTAGAAGCCACTTCATGTGGGATCTTTTGGCGGCGTATTTT  
 GGAGTCGCTTTGATCGGCGACGAAGATACCTACAGGGCTTTTACTACTCTCACGGTCGAT  
 TCTGTTCTTAGTTTTCGTGCACTTAACCTCTCAAGAGGGCAGAACGGAAGACATTAGACGA  
 TTCGAGAAATATGGTGAGCAGATTGCCCCGAGAGGATTTGCCGTCGATTCTACCAATGCT  
 CGAGCAGTACAGCAATATCTCGGCTATATCGACCAAGATATCATCAATAAGAAAGTGTC  
 CGGTCTAGGGATGTTAACCAGATTTTACTGAGATGGCGCGCGCTATCATCAGAGCAATT  
 AGCCGGAATAATATTGGAAGGACATGCGGTCA

>RXN00921-downstream  
 TGAACGTGATTGCACTGGATTCC

>RXN00943-upstream  
 TAGGTACGATCGGACGAGGAGAAAAAATCTGAAAACAATCCAGTGGCCCCACCTCGGCTTA  
 TAAAACCTGGACAACAGTATTTTGATTGGAGCATCACCATA

>RXN00943

ATGATCCGCAAACCTTGCTCGACCAATGCTTGCATCGGTCTACGTCGCAGATGGCGCAGAA  
ACAGTATTGAACACCAGCGCACACGTCGAAGGCACTCAGGTAGTTCTGGATCGTATCCGT  
TATGTGCTGCCCCGTAAGTACGCAAAGCGCATTTCAGAGATCCAGAATTGGTCACCCGC  
GTCATTGGCGGCACCAAAGTCGGTGCGGGTTCTTTGCTAGCTATTGGTCGTGCACCACGC  
ACCTCTGCAGCTACCCCTCGCAATCCTGACTATCCCTAACATCCTGGCTCGCAATGCGTTT  
TGGGAAACCCAGGATGCGGATGAAAAGCGTAACCGCCGCAACGGTTTCCCTCACCAACATT  
GCCCTGCTTGGTGGCCTGTTTATCACTTCTGTTGATACTGAGGGCAAGCCTGGCGTGAAG  
TGGCGTGCAACCAATGCTACAAAGCGTGGAAGAAGCAGCTGCAGCAGGCACCTCCAACC  
AAATCTGAGACTGAAAAGTTCGGTGAGAAGGCCTCTGATTGGTTCAACGATACTTCTGAC  
AAGGTCACCGAGTACGCGTACACCGCTCAGGATTTTGTCTGGTGAGAACAAGGATGACTGG  
ATCAAGTCCGCAACCGAGACTGCTCACAAGGTCGCTGATACTGTGAGCGATTACGCTCAC  
AAGGCTACCTCTTACCTTGAGGAGAACAGCGGTGACTGGCTTGAGGCTGCGCAGGCTAAC  
GCCAAGACTGCTCGTAAGTCTGCAGTGAAGGCTGCCGGCAAGGCTCAGGAAAAGGCTAAC  
TTTGCTCTTCAGGTCGCAGAGGAAACCTCTGGTCGCGCCAACAAGAAGGCAACTAAGAGC  
TACGACAAGCTTCAGAAGCAGGCTGATAAGGCCATCGATCGTGACAGAAGAAGCTGAAG  
GGCATCGAACTT

>RXN00943-downstream  
TAAGTAACTTCTTCCCTGATTGAG

>RXN00945-upstream  
TCACAGTACCACCCACAAGCCACAAGGAGGGTATGGAGGTGGGCGTCTAAAGCCAAATTT  
TTCCCGGTGTTTGAGGCGATTGCACCGTACACTAATGTGC

>RXN00945  
ATGCTTGAACGCCCTCAAACGCCCTAGATCCGCTCATTGTCTCATTGTGCTGGCTGTCATT  
GTGGCGATCATCATTCCAGTTTCGCGGGGTTGCTGCGGATTGGTTTGATGTCGCCGTCAAG  
ATTGCCATTGCGCTGCTGTTTTTCTTTATGGTGCCCGCTATCCACCCAAGAGGCGCTG  
AATGGTCTGAAGCACTGGAGGCTTCACCTGACTATTTTGGCGATCACTTTCGGAATATTC  
CCACTTATCGGCATTGGGCTCGAGCCGATGACTGCATTTGTGTGCGGAAGATATTTATCGG  
GGAATTTTGTTCCTCACGCTCGTTCCGTCCACCGTGCACTCATCGGTGGCGTTTACCTCG  
ATCGCTAAAGGCAACGTAGCTGGTGCGATTGTGTGCGCATCGCTCTCCAACCTTGCGGGT  
GTTTTCTCACTCCGCTGCTGGTCATGCTCATCATGTCTGCGGGCGGGGAGTTACGCTG  
GATTTCCAGGTCTTCCCTCGACATTGCGATTACGCTTCTGCTGCCGTTTCATCCTCGGCCAG  
GTATGTAGGCGTTGGGTGAAGAATTTTGCGGCCAACAAGCAACAAAAATCGTGGACCGC  
GGCTCGATCGCGATGGTCTGTACTCCGCGTTTCTGCGGGCATGGTGGCTGGCATTTGG  
TCCACTGTGAGCGTTCTAGAGATTATCTACCTCATTTGTTTTCGCTATTCTGCTGGTGATG  
GCCATGCTGTGGTTACGCTGTTTCATGGCTACACGCCTTGATTTAACCGGCAGATTCC  
ATCGCTATTAGTTCTGCGGAACCAAGAAATCCCTGGCCACAGGCCTCCCAATGGCGGCA  
GTCATCTTCGGTGGCGCCAATATCGGCCTGCTCATCTTGCCGTTGATGATCTTCCACCA  
GTCCAGCTGATGATTTGTGCATGGCTTGACGCTCGTTATGGTCGTGATGCGCAGGAACAG  
AAAGCCAACGCC

>RXN00945-downstream  
TAAAAGTCCTCAGTAGCTAGCCA

>RXN00946-upstream  
GGGCCGGTGTGAATAAAACACCTTCCCCAAATAGACAGCATGGTCTAGATTAGCTTGAAA  
CGAAAGCGTACATTGCGAGCAACTAACGGAAAGCACACTC

>RXN00946  
ATGACTCACACTCTGCAGGCAACTAATCCCCCTTGATCAAACCGCTTGGCACGCTTGGCAT  
TTCTCCCGAAACAAAGAGGCCATCAGCCGCACCGGCGCCACCAGCCTGAGTGCCACAGAG  
TGGATTAGCGCCACCACACTCAAGGACGCGCACACTTTTCTTCACTTCCCGGGCGATGG  
GTAAACGAGGGCGGGGTAGTGAGGAGCACATTTACCACCAGCTTTCGCAACAACGTGA  
ACGGTGCAACTGCGCCCCGGTGAGCTCTTGATAGCGGAAGATTTACCCCTCACCGTCATT  
GAACGGCTTGGACAGTTTGCACCTTCAGGTTTTTGTATGCACGCAATCCGAAGCGTTTTGAA  
TTCCACTCCATCGCAGCTTTCCACCGTCCGAGGAATGGCGGATTGAGGCTCGCTTCTTC  
CCGGAACCTGACACTGTAAACACCGCTGCAGCTGATGGAGTTATCGTTGCCACGCCTACT

GCGGGTTGGGTGCACTTTTTGAAGGGCCGTCTGGATTACCGTCTTCGTGTAACCGTTCAG  
 AAAAATAATCTACGGGCACTATTTAGCGACAATTCCTCGACGTTGGGCGTTTATCAGCAT  
 CGTTTTGTGCGACATCCACGCCCCTGATGCCGAGGGAAACACCATCATTGATTTCAACCGC  
 GCTTATCTTCCCCAAAGGCATTGAACCGAAAGTTCTGTGCCCATCGCCAGCCTGAAC  
 AACCACCTCAATCTCACCGTGGAGGCAGGGGAGAAGTGGGTGGTTGCTGGAGGA

>RXN00946-downstream  
 TAATACTTGCTAACCGTCCCTAAA

>RXN00953-upstream  
 CTTGCATTCCCCA

>RXN00953  
 ATGGCGCCACCAACGGTAGGCAACTACATCATGCAGTCCTTCACTCAAGGTCTGCAGTTC  
 GGCGTTGCAGTTGCCGTGATTCTCTTTGGTGTCCGCACCATTCTTGGTGAACCTGGTCCCC  
 GCATTCCAAGGTATTGCTGCGAAGGTTGTTCCCGAGCTATCCCCGCATTGGATGCACCG  
 ATCGTGTTCCCTACGCGCAGAACGCCGTTCTCATTGGTTTCTTGTCTTCTTCGTCCGT  
 GGCTTGGTTGGCCTGACTGTTCTTGCATCGTGGCTGAACCCAGCTTTTGGTGTGCGGTG  
 ATTCTGCCTGGTTTGGTCCCCCACTTCTTCACTGGTGGCGCGGCGGGCGTTTACGGTAAT  
 GCCACGGGTGGTTCGTGAGGAGCAGTATTTGGCGCCTTTGCCAACGGTCTTCTGATTACC  
 TTCTTCCCTGCTTTCTTGTGCTTGGTGTGCTTGGTTCCTTCGGGTGAGAGAACACCACCTTC  
 GGTGATGCGGACTTTGGTGGTTCGGAATCGTTGTTGGTTCCTGCAGCCAAGGTGGAAGGT  
 GCTGGCGGGCTCATCTTGTGTCATCATCGCAGCGGTTCTTCTGGGTGGCGCGATGGTC  
 TTCCAGAAGCGCGTCGTGAATGGGCACCTGGGATCCAGCTCCCAACCGTGAGCGCGTGGAG  
 AAGGCGGAAGCTGATGCCACTCCAACGGCTGGGGCTCGGACCTACCCTAAGATTGCTCCT  
 CCGGCGGGCGCTCCTACCCACCGGCTCGAAGC

>RXN00953-downstream  
 TAAGATCTCCAAAACCTGAGAT

>RXN00959-upstream  
 TTTGAGGCGGAGCATCATACCTTTTAATGTCAGGATCGTGACGTGAAGAATTCAGGATG  
 AATTACTCGCTGGAATATTGGTGGGGATAGAGTTGTTGTT

>RXN00959  
 ATGACGGTGATCGGAATTATTCTTGGCAGCCTTTTGGCGTTCTTGACGTCTTCTCATC  
 GTGGTTGGTGCTTTGGGGTGGGCGGCTAAGCTCCCTGGCAACCCGGTTGTGGGCATTTCGT  
 GTCCCTGAGGTGCGTAAATCCCAAGAATTGTGGGATATGGCGCACCGTGTGCGTGGCCCCG  
 TTGTGGGTGCTGTGCGGAGTTTCTTTGTTATTGCATCGCTAGTTGCGTTTGTGCTTCT  
 GGTTGGATGTGGCTTGTGTGGCGTTGGGTGTTGAGGCTGCCATCGCGTTTATTGGTATG  
 GGTGCGGGTATGGCTGCACATACTGTTGCGATGGTTGACGCGAAGCGCATTCGCGAAACC  
 CCGCAGGCGCCTGTTCCGCTGAAATTGAAGAGGCCGGTGGTGTGACTATTACCTCTGCC  
 GATTATCAACAAGACTCCGCTGAATGCCCCAAGAT

>RXN00959-downstream  
 TGACTTGGATGCAGTGCGTAGAG

>RXN00963-upstream  
 CTGGCTCTGACGGCGTCGACTTGTTCTGCTTCTCTGATACACCAATTTTCGAGGCCCTTA  
 ACCTCGCACGTACTTTTACTCCGGAAGGAATCTAGAACTT

>RXN00963  
 ATGCGTCTTGCAACAATCCGCACCAACGGCACCAACCATTGCTGCTCGTGTGAATCTGAA  
 AACACCGCTACCACCATCGAGGGCTTTGCCAACGTCGGTGAATTACTCCAGGAATCCAAC  
 TGGCGCGAGCTGGCAGAAAACGCTGCTGGTGAGGCTGTGACCTTTGAAAACAAGGAGCTA  
 GATGCAGTAGTTCCAGCACCTAAGAAGATTGTGTGCGTCGGCCTTAACCTACGCCAACCAC  
 ATTAAGAAATGGGCGCGACCTCCCTGATACCCCAACCTTTTGTTAAGTTCCCTGAC  
 GCGCTCATCGGACCTTTTCGATGATGTTGTGCTTCCAGAGTGGGCTAACAAGGCTCTCGAC  
 TGGGAAGGCGAGATGGCAGTTATCATTGGCAAGCGCGCACGCCGTGTCAAGCAGGCCGAT

GCTGCTGAGTACATCGCTGGCTACGCAGTGATGAACGATTACACCACCCGCGATTTCAG  
TACGCAGCACCTGCAAAGACTCCACAGTGGCACCAGGGCAAGTCTTTGGAAAAGTCCGCT  
GGCTTCGGGCTTGGATGACTACCCAGATTCTTTTGAGTTGGCGGGCGAGCTGGCAACC  
TACCTCGAGGGCGAGAAGGTACAGTCCACCCCTACCAATGACCTGGTCTTTAGCCCAGAA  
AAGCTCATCGAATACATCACCCACATCTACCCATTGGATGCTGGCGACGTCATTGTCACC  
GGTACCCAGGCGGCGTTGGCCACGCACGTAACCCACAGCGCTACATCGGTGACGGCGAA  
ACCGTAAAGGTTGAGATTGCGGGCCTCGGCTTCATTGAAAACAAGACGGTGTGTGAA

>RXN00963-downstream  
TAAATGACAACCTTCCACGATCT

>RXN00971  
AAAGCACTTTCCATCGGAACCCAGTGGGCACAAGTCATGGGCATTAACCACGCCGAAGCC  
GAAGAATCGAAGCCCTCTCCCGCTCATTAAACCGCTCCGCGAAATGGGCTTTGAC  
CCCACCGAAACCGAAGAAAGCAAACTCCCTCGCTCTACACAGCTGCCCATTTGTGGTCAAC  
GACAAACGCCCATCAGCCTTCGTCTGCGCCATCCACGCCGATTTCATCCAAGAAAGCCTC  
GGTGAAAACAACCGCATCCAGCTGGAACCTCAAACCACTCAACGCGCCGGGCACCTGTAAG  
GTTACGTGTTACGCGAA

>RXN00971-downstream  
TAATTGCTGCACTAATAAGGCCC

>RXN00991-upstream  
ACTTCAAGGAAAGACGGTCCCAAGAGCTAAAACTCCCCACGGCACGCGAAGCTGAACAG  
GCTTTACCGCTTCTAAGGGCAACAGCTTAAACCACGCTA

>RXN00991  
ATGGACATACTATAAGCATCCTCTCACTGCTAGGCTTCGTGCTTCTTACCGCGAGCACC  
GGACTATTTCGTGGCCATTGAGTTCGCACTACCGGCTTAGAAAAATCCACTGTAGAAACA  
CATGTGAAGCAAAAAGGCGACAGCAGCGCCGCGCAGTGACAGAGGGATCATCAAAATCTG  
TCGTTTCGTGCTCTCTGGTGCCAGCTGGGCATCACGATCACGACACTTGCCACAGGCTTC  
CTCGCAGAGCCGGTTTTGGCCAAATCTTACCCACGACTTGAGCTGGTGGGATTAAT  
GAATCAGCAAGCTCCGCACTAGCCCTCATCATCGCACTGTTGGTGGCAACTACCCTCTCC  
ATGGTTTTTGGTGAGTTGGTTCCCAAAAACCTGGGCGATCACCAACCCGTTGGGCGTGGCA  
CGTTTTTGTGTCCACCCGTCAATTGGTTCAACATGGTTCTCAAGCCGTTTATTAACGGC  
ATGAACAAGTCTGCAAACCTTATTGTCCGCAAACCTTGGTATTGAACCAGCCGAAGAGCTT  
GCCTCTGCCCCGTTCCTCCCAAGAGCTACCGCCTTGGTACGCAGCTCCGCGGAAAGCGGC  
GGACTGGATCAAAAACCCGACGCGGTGATCAACCGATCCCTGCAGTTCGGTGACGCCACC  
GCTGATGAATTCATGACACCTCGCTCCACCATTGAATCATTGCGTGCCACAGACACCGTC  
AATGATTTGATCGAGCTTGCCCTGGAAACGGGTCACTCCCGCTTCCCAGTCACCGAAGGC  
GACTTGGATGAAACCATCGGCATGGTCCACATCAAGGACGCATTCTCTGTAGTGCAGGCA  
GAACGCGCCACCACCATGGTGCAGCATCTAGCCCGCAAAATTCCTGTGGTACCAGCCAGC  
CTTGACGGCGACTCTGTCTCAACGCTGTCCGCTCCGCGGCTCCCAAGTTATTTTGGTT  
GCCGATGAATACGGCGGAACCGCAGGCATGGTCAACATCGAAGACGTCGTGGAGGAAATC  
CTCGGCGAAATCCACGATGAGCACGACGACTCCGACGCCGAACGCGATTTCACAACATTC  
GGCGCCAGCTGGGAAGTCTCCGGCCTGGTCCGCATCGATGAACTCGAAAAACGCGTCGGG  
TACGTCTCCCCTGACGGCCCCCTACGAAACCCTCGGCGGCTTGATCATGTACACAGTCGGC  
GCCATTCTCGCGTCGGCGATGTGCCCCACTCCCACTGACCGATACCCCAACCATGGAT  
GAATTCGAATCCGGCTTCTCCGGACGCTGGATCGCACGAGTAACGGTCATGGAAGATCGA  
CGCATCGACAAAGCCGTTCTACCCCCATCACCCATGAAGAAGCAAAGGAGTACGAAAAG

>RXN00991-downstream  
TGAGTATTTGGGCAACTGTCCTT

>RXN01004-upstream  
CCGGACGCTGGATCGCACGAGTAACGGTCATGGAAGATCGACGCATCGACAAAGCCGTTT  
TCAACCCCATCACCCATGAAGAAGCAAAGGAGTACGAAAA

>RXN01004



GTGAGTATTTGGGCAACTGTCCTTCTAATTATCGTCCTTCTTTCCGCCAACGCCTTCTTC  
GTGGCCGCGGAGTTTCGCACTGATTTCCCTCGCGCCGGGACCGCCTGGATTCCCTGGTATCC  
CAGGGTAAAAAGGGAGCTGAAAAGGTTCTCTACGCAACCGAGCACCTCTCCATCATGTTG  
GCGGGCGCTCAGTTTCGGTATTACGGTCTGTTCTCTGATTCTGGGTAAAGTCGCAGAACCT  
GCGATCGCCCACTTCATTGAGGTGCCTTTCACCTCCTGGGGTGTTCCAAATGATTTGATC  
CACCCAATTTCTTCGTCATCGCACTGGCGATCATCACCTGGTTGCACATTCTCTTTGGT  
GAAATGGTGCCAAAGAACAATCGCTATTGCTGGCCCTGAAACCTTAGGCATGTGGCTTGCT  
CCAGTGCTCATTGCGTTTGTGAAGATTACCCGCGCGTTGATCGAGTTTCATGAACTGGATC  
GCCCCGTCTGACCTTTCGCGCCTTGGTGTGGAGCAAAAAACGAGCTGGATTCCACCGTG  
GACCCAGAGCAGCTGGCATCAATGATTTCCGAGTCCCGTTCCGAAGGCCTCCTTGATGCT  
GAAGAGCAGCCCCGCTGTCCAAGGCGCTGCGCTCTGAGCAGCGTTCCATCAAGGAACCTG  
GTGATTAAGGATGAGGACGTGCGCACGCTGGCGTTTCGGTAAATCTGGCCCCGACCTTGAC  
CAGTTGGAGGAAGCAGTCCGCGAGACCGGTTTCTCCCGCTTCCCTGTCACCGGCCGCGAT  
GGATCCTACTTGGGTATATCCACATCAAGGATATTTTGCTCGTCTGGCTGATCCTGAG  
ATGGATCCCTCCGAGACCATTCGCGTTCTGCACCTGCGCCCTTTGAGCAATGTGGATGCC  
GACGGCCTCATGGATGACGCTCTTGATTTTATGCACTACCGCTCCGCGCACATGGCTCAG  
GTTTCGCTCAAAGGTGAGCTTCTCGGCGTGATTACGCTGGAGGATCTCATCGAAGAATAC  
GTGGGCACCGTCAACGATTGGACTCACGAAAGCTCCGACGAC

>RXN01004-downstream  
TAGAAATAGTAACTGTGTTGGAC

>RXN01016-upstream  
TGCCCGTCGAGGTGAACGCCCAAGAATAGTTCTCTTTTCGTCGACTTCTCACGTTGATACC  
GCTCGGCATCATCCACCAAATTCCTCCAGCCGGGTGAAGCA

>RXN01016  
TTGTTGCCGTATGCAATAGTCGGCCTGGTCATTTTGCTGCCATCCTCCTGGTTGCCTCGT  
TGGGCTGTGCGAGTCCCTTGGCGAAGTGTGCTGCTTGTGCCAGCGGTGGTTTTCGGTGGCGGG  
TTCTTGCTTATCCCTCAATGTTCTTGATCGGTTTCAGCGCTCGTTAGGTATGGAGTAGTC  
GATCGGGCAGAGAACGCACCGCGGGCTATGGGAGTCTTTTCGCCGTAAAGCGCAGCAATC  
GCTATACCTACGCTGATCATCCAGGCACGTGACATCACTTCTTCAGGCTTCTCGATCGTT  
TCCACAGTGGCGGGACTCGCGCTTGGCGGCGTCTACATTTCTTTAGTGTGCTGGCCTTG  
CATAACCGATTTCGCGGTGCACTCGCTGCACTTTTCGCACCTTAGGGCGTATGGCGCTA  
ACCAACTACATTGGTGCAACGATCCTCATGCTCATTTGGCGGGCTAATCGTGGATCTTCCA  
CACAGCACATCATGGACAGCTACGGTGCTCCTAGCTGCGGGTATTCCTCATTATTCAAGAG  
CTACTTTCTGCTTTATGGTTGCGCCACTACACACAGGGGCCACTTGGGTATCTATGGCGT  
TGGGTGACTTGGGGAAGCCGTTCCCCCTTCCTTACCCGTTCCGCATCA

>RXN01016-downstream  
TGACAGGTACGGAAGTGTCTAC

>RXN01023-upstream  
AAGCGAATCCGGGAATGAAAGTGAGTGCGCCAAAGTCAACTCCTTGGTTCAAGTGTCAGT  
ATTTTTCTAGTCTATCGCCCCACAGGTAGGCTCAGGACAC

>RXN01023  
ATGAGTGCCGTGAACAGTGCTGGTTCGCCCAGCCAACGGGGGAATTAACAAAACCCCCATG  
ATTATTGCCCTAGTGTTATCTATTGTGTTGGTTTGGCGGTGCTGTTTCGGCGCCCGAGTC  
CTCCTTGGCCCCGCCGGCCAGCAACAGATAGCCATGAGTGGGCTTCCCGCCCCAGACGCA  
GAATCTGCTGAGTGCGCCGATTAATCGAGGATCTCCCCGGCGAGGCCTTCGGGCACACC  
CGTGCAGAAATCATGGATCCTGTTCCACCGGGCGCTGCCGCTGGTCCACCTCAGACCTC  
GAGCGTGTGACGCTGCGTTGTGGCGTCGATATGCCATTCCAGTACACCGCGCTCGCCAAC  
ACCGTCGACGTCGACGGCACCACCTGGCTACCTGTCTCCGACATGACCCCCGGCTCCTCC  
CTGGAGACCTGGTACTCCGTCAACCGCTTCCCCGTCGTCGCCATCACCGCCGATGACATC  
AGCACCGACAGCGCCGACAACCCCGTCGCCCCCTTCAGCAGCGCCGTCGACAAGCTAGAA  
AAGCGCGACGGCCAGCCCTTCGACGCCCCACTTACCGGCTTGAGCTCAGCCGGCACCACA  
TGCACTTCGCTTTTCGACGCCCCCTCCCCGCCAATCGAAGTCGGCGGCGACGACGGCACA  
ACGTACGAACGCATCGAGGAGGACCGCATGCAGGCCGCGGATACTCCGACGACGCGATC  
GCGTGGGACACGCCGGGATTAGAACCATTGTGATCCGTTGCGGCGTGGAGCCTTCTGAG

AACTACGCAGCCGGTGCCATGTTGCAGCAGATCGATGACATCCCCGTGGTTCGAGGACACC  
ATTTTGGCCTCCGGTACCACCTCGTCTACCTGGTATGCCCTTGGACGCGAGATCGACATC  
GCCGTGTCTCTGCCTCAGGCTGCTTCCTCTTCCCTGATTACTATCTCCGGTTTCATTGAA  
GACACGGTTCCTGCGGAA

>RXN01023-downstream  
TAAGACATAAAAAATCGCCCCAC

>RXN01028-upstream  
CGCAAGCAGCTGCACTATATTCAGGCATTTTACCGTGCCCTGGGACCCATCAACGCCGCTT  
CAATGACGCTGACCCAGCGGTGACCCATCCGCATCTCACA

>RXN01028  
GTGATCTACCCACCGCTCACCCCTGCATCCGAAGAGAAATTCAACAAGATCACCTCAGTC  
GCTGCTGTGAGCAAGCGCCCAACCACCCTGCCGTATTTCCGTGCAGATGGTTCACCTACT  
CGTGGCTTTTGCTAACTTCTCCACAGGAGGTATTACGGTGCGGAATACAACGAAGATCGT  
TTTGACCATGATCAAGATCTACACACAGTGGCAACCCGTGAATTCTTCGCCATTCTTGAT  
GCGACATTAGCGGCTCTCTACGCAGCCCAACAAGCCGAACCTGAATCGGCGGACTACCAG  
ATTGCACAAGACGCACTCGCCTGGGCAAAGAATGTACTTAGCGATCAAAAACTCATCGCT  
AAGTCGCCTCAGTTATACAACCCGAAACCGGGGTACCTATGAGTGGGAGTTTGTGCGT  
CAAGCAGCATGGTGGATTTCGCAACAAACCGGTTGAGGTTATTTTACCAACAGGTGAATCA  
ATGACCGTAAAACACAAATCTGTATTGGCATCTGCGTCTTACCCACTCCGAGACAACGTG  
GCGTACTGGCGTAGCGAACCCAAAACACCACAGCTGTTTCCCGTAGCAAAATCTGGTGGT  
TCCTCGCTTGAGAAGAAGTACAACCTACACCTCTGTGGGTACTGCTATTCACGAGGACTTT  
AGCAGTTACTATCCGCTCTTGCTCACC AATATGGCTGCATTTACCAATGCTGACTTAGGT  
ATTGATGAGAAAACCGGGCGCCCTCGTGACCGCTACCGTGAAATCTACGAACAAAAGAG  
ATCTATGGCGCACAGCGCAAAGACCCCTCCATTGATGAAGAAAACAAAGCAACGCTCTAGGG  
ATTTTGGCGCAAGGTACCAAGTTGATTCTTAACCTCGGCCACCGGTGCTGCTGATGCTGGT  
CACGACACCCCGATCCTCATGAACAATCGCGTTATTGCCATGAGGATTATTGGGCAGCTA  
TTTTCTTGAGAAATTGGGCAAGCTCAATCACTGGCTGGTGCAACGATTATTTCCACTAAC  
ACTGATGGCCTGTATTCCGTACTCGATATGGGGACTAACCAGCGCGTTCTTGATGAACAC  
GCTACAGCCATCGGTGTGCAAATTGAGCCTGAAGAACTGGATATTGTCTCCAAGGATTCC  
AACTCACGTGCCGAATTTCTCGGCAATGGCTACATCAATGCGGCCGGTGACTTGGCGTGT  
TGGGATGGACCCAACTCTCGGAACCTACTAGATCACCCGGCCTTTGTTGACCATGTGCTG  
GTGAAGTATTTCCAGCTCGTCTGTCACCAACACTGTGCCAGAGATTCCAGAAACACCTGAG  
CTTGAGGGTGTACCGCTGGCTCTTGATCAACCCATGAACCGCCACGAAGTCTCGAAGATT  
GTCGCCACTATGCACAAGGAATTTCGAGCCGAAAAAGCTGCTGTCGTTTTACCAAAACATT  
TTGGCCTCTTCACGCGGTTCTAATACCTTCCATTCTCTGTCCCTATATCCCTGCAACA  
GAAGGAGAAGAAAACCCACCCTGCAACAGATACCAGCACTATTGCGACACCAACCTTGAGC  
TTTGATGCTTATGGTAATAAGGCCGAGGTATGCCGACTCAATCCACTGTGGATAAGCGC  
GTGCCCTCTTTGCTGCAGTATTACACGCGTACATTCCATGTGCGACAAGATACGCAGCAG  
GCTGTCTTTGATGTTATTGGCGCCAACCCCGTGTCTATCGCCGAGCAAAAGCTGCATCC  
ATATCACCGGCTTCTGCTGATTACGTTAGAAAGAGGGCTGGCCTCCACCAACGCTGAC  
CCAGTAGCCAAGCATGTACTAGAAATTGCAGGAGCTGATGTGGAATCGCTGCGCCATGAA  
AAGGATCTCAAGGTCACCAAGCACACTGGCCAAGACCCAGCACTGCCGTGCTGCTGGTCTTT  
AACCAAAACCATTTGGCATAACCCCAACGACGATGTGATTAATGCATTACTGGGCGCTATT  
GACCAGGATGCCTACATTGACATGGCGATCTCGTCTTACAACAAGTCTTGGCACAACATT  
ATCCCGGCT

>RXN01028-downstream  
TAACTACCGCTGGGTAGACCCCT

>RXN01069-upstream  
TCCTAAGCTCTCTTGAGTACCTGAGACCTTCTCAGCAAAACACAAAGTGCCTTCACCCAA  
CCTGGGGTGGAGGCATTTCTCATTGCTAAGGTGTGCATC

>RXN01069  
GTGAACGATTTACCGAACCTACCAAAGCTGCCCTTCAACTGGACATGGGTGCTGGCAACT  
GTTGCCACGACAGTGGTGTGGCGGGTATTGGTTGTATGTGTATTACCCGTCGTTGCCA

GATCCTATGCCGGTGCATTGGAATGGATCCGGGGAGGCGGATAATTGGACGCCTAAATCG  
GTGGGTTTCGTTTCTTTCACTGATTTTGATAGGGCCAGGCATTATTTTGCTGACCCTGTCTG  
GGTATGCAGGCGTTGCTGACCATGCAGTCTGGAGTGATCACGCAACGCGGTGGGGCGAAA  
TCGGCGAATGAAGCGCACCGGCAGTGGGAAACCTACAAGGCAACAAGCATGCACATGGGT  
TGGTACATGTTTGTGCTCAACGCTTTGATTTTGGTGATGATCCTCAATGAGTTCCGCCCA  
AACCCTCTGCCTGGTGGATTATCATCGGGCTTATTGGAATTATTGCTGCCACGATTGTC  
CTGTTGGTTCTGATTGGAAAAACAACCACGAGTTTGGCAAAGAAATACCCCATGCCTGAC  
CAAGATGGAAAGACGTGGGGGATTTTCTACAACGATCCGGACGATAATCGGATCTTAGTG  
GACACCGGGATGGGGATGAATTACACGTTTAAACATTGCCCATACGTGGGGCAAGATCTTC  
GCGGTTTGTATCTTCGCGGTGCCAGTACTCATCGTTTATTAAACCGTTCTCCTT

>RXN01069-downstream  
TAACCTCGATCCACCGATGTGCC

>RXN01071-upstream  
CACCTGAAATTGGCTGAGGGAGAGGCACCGACTGGCACCGAAGAGGTGCTTGCCCTGAAGG  
CGGGCGCTGAGGCGAATGGCCTGGAGTAGGGGACCAGATC

>RXN01071  
TTGGTTCGTGGACTCCAGTGGCCGCTACAACGTCACCATCACAGGCCTGACCACCACTGAG  
ACGGATTTCGGCCACCGCGCTGAACCTGCAGATGTCGGAAGCTGGCTACCTGGAGCGTTAC  
ACCGACGGGGCTACCGTCCCCAGCGTCATGCTGTTCGGCTGCAGATGGCACCAACGCCTCAA  
GAGCTTGTTCGACGCCCTCGCTGCCGAACCTTGGATCGAACTTTGATGTAGAAACCGGCGAA  
CGCTAGTCGAGCAGGCTACAGGAATGATCACGCAGGCCTTGAGCTTCGTGCAGTACTTC  
CTCGTTGGCTTCGGTCTCATTGCACTGCTGGTTGGTACCTTCATCATCGCGAATACCTTC  
TCCATGATTGTGGCTCAGCGCATGCGTGAGTTTCGCTCTCCTGCGAGCCCTGGGTGCGGCG  
CCAGGACAGATCACTCGCTCTGTGGTGCTGGAAGCAACCATCGTTGGCCTCTTCGGCTCT  
GCTCTTGGTGTGCTGGGTGGTATGGGCCTCGTAGCGATCATTTCAGCTGTCTCAATAAC  
CTGGGCATGCCGATGGGATCCAGCGTTGGCTTGACTCCTTCTGCAGTGGTTACCGCGCTC  
GTATTGGGCACCGTTGTACCATTTGTGAGCGCGTGGGCTCCGGCTCGTTCGTGCAGGTGAG  
GTTAAGCCTGTGTGAAGCGATGCGCAACATGGAAACCACCACTATGCGTTCCATGATGGGG  
CGCACGATCACCGGTGGCATCGTTCTAGCACTCGGCATCATCTTTGCGATTGCCGGTGCG  
ATGATGACTGATTCTTCCACCGCTACTCGTTCCATCCTGGTGGGCATTGGTGCAGTGT  
GTCATCGTGGGTACGTTTCTCTCTCACCAGCGCTCTCCATGCCTGTGGTGGGTGGCCTG  
GGCAAGGTTATCGGTGCACCGTTTGGCAGCGTTGGAAGCCTTGCTGCGACCAACTCCAAG  
CGAAACCCCTCGCCGTACCGCAACTACAGCGTTTCGCACTGACGTTGGGCATTGCCTTAGTG  
ACTGCAATTGGCATGCTTTCTGCAACCATGAAGGACGCAGTCTCCGACATGATGGCGGAG  
CAGTACACCGCAGATTACATCCTGCAGGGACCAACCAACGGTTCCATCACCATGCCGAAG  
GAATCTGTCAATGATGTTTCGCGATGCTGAGGGCGTTGCCGATGTCGTGCTCGTTTCCATG  
AATCTGCCTCGGTGACGGTCAGGCTTCATACAGCCAGCTGGGCCAGTCTGTAACCTTT  
GTCGTGACGGCGACCTGAGCAAGGTCATCAGCACAGAAAGCATTGATGGCTCCCTCGAC  
TTGAGCAACCCAGGTGTTGTGACTAACAGACGTTTGTGATGAAAACGGCTGGGCAGTA  
GGCGATACTCTGCAGCTTGAATCAATGGGGCAGACCATCGGCGATATCGAGTTGATCGGT  
ACCTTCACCGGAAACGACGCCATCGGAAATATGATCATCTCCGAAAGTTCTTTGGCTGAT  
ACACCAGCGGCAGACACTGCTGTTCTCAGATGATGCTGGTGGTAGGCGAAGAAGGCTTT  
GATAAGGAACAACCTGCGCACCAACTTGGAAAGACGCAGTTCGCTGATTACATTGTCTCTCT  
GTGAAATCAGCAACCGAGTTTCGCTGGTGAACCGTTGCCGATGATCGACACCATGATGAAC  
ATTCTGTACGCGCTGCTTGTCTGTCTGTCATTGTTGCCATCATCGGCATCATCAACACC  
CTGGCACTGAATGTGATCGAGCGTCGCCAGGAGATCGGTATGCTCCGCGCAGTTGGCGTG  
AAGCGCGGACAGGTCCGACCATGATCACCTTAGAATCTGTTTCAGATCGCCATCTACGGT  
GCTGTGATTGGTATCGCGATTGGTCTTGGTCTGGGCTGGGCCTTTGTGACAGTGATGTCA  
GGCGAAGGACTAGACGCTGCGGTTAGTATCCCGTGGGGTCAGGTTCGGACTGATGCTTGT  
GGTTCCGCTGTAGTCGGTGTATCGCCGCGCTGTGGCCGGCAGTCAAGGCATCTAGGACA  
CCACCTTTGGATGCGATTACCGAC

>RXN01071-downstream  
TAGTTTTAGCGGCAGTTGAATCA

>RXN01075-upstream  
GCGGTGCGTGTTCATTAGCAGGTCAAGCGCGTAATTGAGGGCTAGACTGGTTAGTACCGG  
ATATTCTTTTTTTCTTTAGTTTGTGGGAGTGAGATAACT

>RXN01075

ATGGACAAATCCAGTCAACATCCTCAATGAGCAGGAAGCTTTGGAGCGCCTGCAGTCGGTG  
TCTCTTGGTCGCGTGGTGGTTTCGTGCGCAGCGATGAGATGGACATTTTCCCGGTGAAC TTC  
ATTGTGGATAAGGGCGCAATTTACATTTCGTACAGCTGAGGGCAACAAGTTGTTTCAGCATG  
AATCTCAACCACGATGTGCTCTTTGAAGCCGATGAGGTCAAGGACGGAAAGGCCCTGGTCC  
GTGGTGGTTTCGTGCGACCGCAGAGATTGTGCGCAAGCTGGATGAGATCGCTACTGCCGAC  
ACTTTGGAGTTGAAGCCTTGGATTCCAACCCTGAAGTCCAACCTTTGCCCGTATTGTTCCG  
AATGAAATCACTGGGCGGGAGTTTACCCTCGGCGAGGAGCCTGAGCGCTAC

>RXN01075-downstream

TAGCTTTGCCACATTTCACTAAA

>RXN01085

CGAAAGCGTGGTGAAGGACTTGATCCCAACTCACCAGAAGCTATTGAGCAGGCGAAGAAG  
AAAGGGGAACGGAAGGCTCGTAATGAGCGTTGCCGCAAAAACCTTCAAAGGTGGTGGCACC  
AAAGATCTTAAGCAGACTGATCGGACCTTTGATCAGCTGCGAAAACAGCGGGTGACGGAT  
AAAGCCCCGAACCGTGACGTACACAATGAGCAGCAACTGGCACGCGGTGAAATCGGAGAA  
ATGCGCTCACCAGATGTGGGTTGAGGTGGGTGCTGCGATTCTGGGCGTGTGTTGCTCTGGTT  
GTGATGTGGTGGCTGGGCGGGTATCGGGCTGCTGATCCAGACCATGATGAATACTGGC  
TCACCTAATGACAAAGAGCTTTTGTGATGAGCTTGGTGTGAGACCTATTATGTTGCTGTC  
GAACAGCAAATCGGCACCAGTAGTGCTCACACCACGTGCTACCAACCGCTTGATGAATTT  
GGCAATAATTTTGGCGACTGTACGCGTAGCGTGCCCTAAAGAGCCAGTGTGGTACGCGGAT  
TATGTAGCTAGTGTGTTTCGAGAACATGGCTTTGATGCACCAGAACCTATTGATAATTTCG  
GTGGGTAGCTGGCTGTTATTTGGTCATGTGGGCATTATTCGGGTGACGTTTGTGATTGCG  
GTTGCAGCGGGTGTGTATGCGATGTACGCGCAGCAATGATGCGTCAGCTAGAAACACAA  
AACGTCGCTGTGGACACCACCGATATTAACCAGCACACCAATGACGCACGTTTGGCGATT  
CCGCAGGAGATTGTGCGCGATTGAGTCTGTTCCCGGATGTCGGTGCACACTTCACCAGT  
CCAGCCCTCAAGCATGATTTCCCATGTGATGCTGTTCGAA

>RXN01085-downstream

TAAGGGCTTTGAAAAAGGTGGAT

>RXN01121-upstream

AAAGATTTACTGCGTACAACCTCTAACCAACAATATTGGCAATGGGTGTTTCCATCTTAGC  
GCTTTACCTGTGAACCTCTGCAGAGCGGTACGCTTAAGCTA

>RXN01121

ATGAATCCCGAATTTATTACGCGCGCAACCGAAATTGAAACCACAAACAGGGGCGCTTCGC  
CCGATCGACTCAGCAAAGAAATAGTAGAACGCTACTGTGATCCCCAGTTTAGCGCGATG  
GAACGCCAACCATCGGGCGTGC GCGTTGTGTGTCGCAACCGCCACCTCCGTCACGCTG  
ACCACGTATTCACGCGGGTGGTGTACCTCGATTCCGGCCGGCCGGGCGGCAAGATTGAT  
GTGCTTATCGACGGCGCCCCACATCTTCCACGCCAACTTCCGGGGGCGAGACCACGGAA  
GTCAATTTTCATCACC GGCGCCACGGAACGGCGCCTGAAAGATCCGCAGGTGCTCACAGTG  
GATGGACTTTTCAGAGCAGGAAAAGGTGGTGGAGTTC TGGCTGCCTCACAATGAAGAAATT  
GAAGTGATCTCCCTTAAAGCCAACGCAGCTTTAAACACTGTCTGAAGACACCCGTCCCGTG  
TGGATCAATTACGGCAGCTCCATTAGCCACGGTTCGGTTGCCACTGCCCCAACCAAAATT  
TGGCCAGCCATTGTTGCCAGTCCAAAAACTACAACCTGCGTAACTTCGGTTTGGTGGC  
AGCGCCATGTTGGATCCTTTTATGGCGAGGCTAATCAGGGATACTCCAGCTGATCTGATC  
ACCTTGGAATTTGGCATCAATATTGTCAATGGTGATGTGATGCGTCGCGCGGACTAGAG  
GCTGCTGTGGATGGGTTTCATCAATACCATCCGCGATGGCCACCCACACGCGGATCAAG  
ATTGTGTCGCGGTTCTACTGCCCCATTCATGAGAAAACCTCAGGACCCGGCGCGTTTGAT  
ACCTCATCGTTTGGCAGTGGTCAGATTAGGTTTCATCGCCACTGGTGAACCTGATGAGCAT  
GGTCGACTGACGCTGGAGATGGTGCGTGAGGTGTTGGAGGGGTTCGTGCGAAAAGCAAAA  
GACCCGCACCTGACCTACGTCGATGGTGCGAGCCTTTATCAGGCCAGCGATGCGCGGTTG  
CTGGATAATTTGCACCCAGACGAGGCGTGCACGCCTTAATTGCGCAGCGTTTGCTTAAG  
CAACTT

>RXN01121-downstream

TGAAATCGGCTTCGGTGATTTTCG

>RXN01128-upstream

ATTCGAGTACAAATAAAATTTGAGAACAAAAAGATGGGGGGAAATATGTTAAAGTGC GTTA  
TATTGCTTTAGCGAAAGTAACTTCCATGCATCAACGTTTCG

>RXN01128

ATGAGCTTCACTTTTCATTCGTACTTTTTTCGTACTTTTTTGGCATCACGTTGTTAGTGTCA  
TGCGTTCCAGAGCCTCCTGACTCCTACACTAAAGAATCCACTGTGCTGCGGTATCAGGTC  
TCTGATTTCAATCTAAACTTTCGTGGAATTAGCAGTTGCGCTTGGGTATTTGAACAACATT  
GAGCTCCAAGTAGTCGGATCTGTACAAGGCGGCGTTGAGTCCATTGAATCGCTCAAAAAG  
GATGACATTGACTTCGCGGCAGTCCCCCTTCATTGGCCTTGTTGCAGGAGAGATAGCCACC  
GGTGCGCCCATCAAAGCAGTGGCCGCAAGTTACGGAATTTCCACGATTCTTCTTCTGCA  
CTTCTAGTCCCTTAAAGACAGTGAGATACACGAAGTGCACGATCTCATTTGGCAAAACAGTT  
GGCATAAACACCCCTCGGTGCTCTGGGATCTGCGATGGTTGAGCGTCATCTATTTCGACGCC  
GGTCTCACCGAACCCTGAGATCGTGAGCGTCACTCAACGTGCATTACCCGGTGAGTACTTA  
GAACAACGCCTCTACCAGGGGCAAGTTGATGCAATTTGGGTCACCGATAGCGCTAAACAC  
CAAGCGCTTGAAACTGGAGATTTTCGGATCTTGGCAGAGGATTCAGACCTTGTGCAGGAA  
CTCAACACTGGCTGCATGGTGGTGTGCGAAAACTCATCGACGAGCACCCCGCAGTGGTT  
GGAGAATTAGTGGATGGAGTAGCTCAGGCAATCGAGTTTGAACGATCCCCTCCCTGAA  
GAAGTGCGCGAAGTTTATTTCAACTACCTCGAAGCCCATGGTCAGAGTGATAGAATATCC  
AGCTTTAGATATTGGGAGCATTCGGGCATCGCAACCCGAGGTGGAGTGCTCAGTGATAGG  
GAGTTTCAGCATGTGGTCCCAC TGGATTGACCGCCAATACGACGTCCCCGATATCAATCCA  
GCAAGTATTTACACCAACCAATTCAACCCATACCGAAAAGTAAACCCCTCGCCA

>RXN01128-downstream

TAAAAGGCAAGGGGGTCGGCGTT

>RXN01134-upstream

GATATCTTGAACCTTGACGCTGGCTGAATACATTCTCTGCTGCCGATGAAATGATCAAGGGC  
TTTCGACGAGGCGGCTGAATTCCTGCGTCAGCGATGCATTT

>RXN01134

TTGAGTCTCGACCAGGTTCCATACACCGCGCAGATTGTTCCACTGGCCGTGATCCTCACC  
CTGCTTGATGCAGAAGAAATGGCCACCGCACGTTTCATGGGATCGTTTGAATCAGTGGTTC  
TGGAGCGGTGTCTTGGGTGAGCTTTATGGCTCGCCTGCTGTGATCGCACGTTCCGGTCGC  
GATACCGATCAAGTTGCTGCGTGGATTTCGTGAAGGTGCCGGCGAAACTGCGGTTGTGCCA  
AAGACTATTCGCGATACCGTTTTCACGAATCACGCTCTTCTCAGTGCAACCCAAGACACC  
GGAGTGTGGAAGGGTATCTTCGCACTGCTCATGGGCAGGGGAGCACGCGACTGGCGCACC  
GGACAGCAGTTTGATCGCTGGACTTTTGATGAGCTGGGTGCAATTTCCACCAGATTTTC  
CCCACCAAAATGGTGCAGGAACGCGGCATCGATCCTGCTTACGGAATCAGTACTGAAC  
CGCACCCCGATGGGTGCGCGTACCGAAGTAGTCATCGGCGATACCCCTCCATCCCGCTAC  
CTGTCTCGTGTTCATCCAAGTCGCTCATGGGTGATGAGGAATTCGATCAGATGCTGGAT  
ACCCACCTGCTCAGCGCGGAAGACCTGCACAGTTCCAACACCACGCACTTCTTTGCTTCT  
CGACGCACCAACTTCATCGACATGGTTCGAGGATGCCATCGGTAAAGCGGTGATCAGGGAC  
GTCAACGAGTCAGATCTCACCGGTGGACACGATGGTCCCTCGGTACACGGG

>RXN01140-upstream

TATCCAACCTCCCGATTTTCAACGGGATTACGCTTGGGATGTTGATCGCATCCGAAGCCT  
TATAACCACTGTTCTTCGTGGTTTTTCCAGTAGGTGTGCTG

>RXN01140

ATGGCACTAGACACCCGCGGCGAGGAAATGCGTTTCCGGCCACGCGCGCTGTCCGGCGCC  
CCAGATACGGGCAAGGATCCAGGTCTTTTGCTTCTCGACGGACAACAGCGCCTCACCACC  
CTTTATCATTTGCTTCAGTGGCGATGGCTATGTAAATACGGTGGACTTCCGATCAAAGAAA  
GTGACCCGGAAGTTTTATATTGATGTTGCTAAGGCTGTTGAATCTCCGGTCATGTCCGAT  
GAGGCTATTTTTTCAGTTCGACGAAACCGGCAAAATCATCTCCCACTTCGGTCCAGTGATC  
GACGGCGGCATCACGATTTTAGAAACAGCACTTGCTCATGGTTGCCTTCCAGTTTCTGTG  
CTGCTGGATGATAACGGCACTGATTTCTCTTTGACCTCGCCGATATGGCAGGAGAAGGC  
GCTCGCGAACACGCGAAGCGCTTCCAATCAGAAATCGTTAAGACCTTAGTTAGTTACGAC  
ATCCCAATGATCCGACTGGATCGTGAAACCGCCAAGGGTGGAAATTGGTTCCATCTTTGCT

CAGGCCAATAGCTCTGGCTTGCAGATGGATGTCTTTGATTTGCTCACCGCGGTGTTTCGCA  
 GCCGATGAATCGGTGGAGACCGAATTCTCACTGCGTGATGACTGGGTGCGGGTTGAACGA  
 AACCTTCGCCAACACTCCGCACCTTGATGGCATCGGCAGCACGGAGTTCCTCACCGCAGTA  
 GCCCTGTTGGTCACTGCCCCGAAGGGACATGCGTCTGGTTACCGTGAAGATATCTTGAAC  
 TTGACGCTGGCTGAATACATTCCTGCTGCCGATGAAATGATCAAGGGCTTCGACGAGGCG  
 GCTGAATTCCTGCGTCAGCGATGCATTTTGTAGTCTCGACCAGGTTCCATACACCGCGCA  
 GATTGTTCCACTGGCCGTGATCCTCACCTGCT

>RXN01140-downstream  
 TGATGCAGAAGAAATGGCCACCG

>RXN01148-upstream  
 ATAGAACAAGGGTAGCCAAATCTTGAAACAGCGCGGGCCCCCGAATCCACAATGCGAA  
 TCCACAATGTCACCTGAAGCCGTTAAAGTAGGTGATCATT

>RXN01148  
 ATGACCAGCCCAGTTGAAAACGTTAAGAAAAAGCCACGCCCATTGGCGCTGTCACCGTCG  
 CGCGCCGGGGATTACCAGCAGTGTCCCTGTTGTATCGCTTCCGCGCGATTGATCGCCTG  
 CCAGAGCCTAAGACCGTCGCCACGGTCAAAGGCACGTTGGTGCACGCTGTGTTGGAATAT  
 ATGCACAAGTTGCCGCGTGAAGAACGCGAATATCCAGCCATGGTGAAGCAACTCAAGCCC  
 ACCTGGGCGCAGATGTGTGAAGAAGACGCAGAGCTCAAAGAGCTTGTTCAGAAGATGAG  
 CTTTATGATTTCTCTCGTGGATTCCCGCACCTGCTGCGTGGCTACTTTGAAATGGAAAAT  
 CCTCAAGGTTTCGACGCCACCGAATGCGAAATGTACGTGGACACTGTGCTGCCCAACGGC  
 GTTCTGTTTCGTGGTTCGACCGTGTGGATACCGCCCCACCGGCCAAGTCCGAGTTA  
 TCGACTACAAGACTGGCAAGAAACCAAGCCGAGTGGAGCCAGCAAGCGCAGTTCCAGA  
 TGCTGTTCTATGCACGTGGTCTACTGGCGCATGTTCAATGAAATCCCAGCTCAGCTTCGTT

>RXN01148-downstream  
 TAATGTACCTCAAAGTCAACGAT

>RXN01153  
 CCGTTTTTAAAGCCCGATCGTTACTTCCACGCACGCGGTGGTGGCGTATTCCACCGCGCGT  
 GGATTTGGTGAGCACCGGGTGCCTTGGGACTATGCGCAAGAGTCCCCACTGCGCGATACT  
 CGTGGCTTTGATCTGCGCCGATACCACAGGCCCTGTGGTGGATCCGCACGCCATTGGT  
 GTGGCCAACGTGTTTGTGCCAATGGTGCCAGGTTTATGTGATCACGCGCACCCGGAA  
 TACTCCTCCCCAGAGGTCACCAATGCGTGGGATGCCATGGTTTACGACGCCGCTGGTGAC  
 CACATCCTTATGCAGGCCGTCTCTGATGTTGCGAGTTTCACCAGCCAGAATAGGTCTGTG  
 TTGGACGGCCATGATCCGTGTCCAGCTTTGAAAATCTACAAAAACAATGTGACGGTAAG  
 GGTGCTAGCTACGGGTTCCACGAGAATTACCTCTACTCACGTGAGACGGATTTTGATGTG  
 CTGGCTCAGGCATTGATCCCATTTTTTGTGTGCCGGCAGGTCATCATCGGTGCCGGACGT  
 GTG

>RXN01154-upstream  
 CCGGGGAATTCCAGGTCAGTCAGCGAGCCTGACTACCA

>RXN01154  
 TTGAGCAAGAAAATTTCACTGGAAACCACACTCAACCGCGGCATTATCAACACCCGCGAT  
 GAACCACACACCGACGCTGATCACTGGGGTCGCTGCACGTGATCATCGGCGATGCCAAC  
 ATGTCGCGAGACTGCGAATTTCTCAAATTCGGCATGACCTCCCTAGTGCTGGATGCCATT  
 GAGGCTGGGGTGGATTTCTCTGAACTCAAGCTGAAGAACGCAGTGAGTGAAGTAGCAAAG  
 GTCTCCCATGATCTTTCCCTTACCCACCAGCTGCGATTGGCGGATGGTTTCAGAGCTCACC  
 GCTATTGATATTCTGCGCCGCTATTTGGACAAGGTGCAGCCGTTTGCAGAAACCCAGTG  
 GAACAGCGTGTCACTGCGCTGTGGGGTGAAGTGCTGGGGCTCCTGGAGAATGATCTGCTC  
 TCCACCAGCCATCTCCTTGATTGGACTGCAAAACTTGCCCTGATCAAGTCTTTTGAGGCG  
 CGTGGGCTGTCCATTAACGATCCCAAGATGTACCTCATTTGACCTGCAGTACAGCGATATT  
 GATCCACAGAAGAGTCTGTATCACGCACTGGTATCCAAGGGGCGGATGAAAACACTGTGC  
 AGTGCGCAGGACATTGCAGATGCAGCGGCCACTTCACCG

>RXN01155-upstream

ACAGCTTGCTGGATGAAATCGACGGACTGTTGGAAAACAACGCCGAGGAATTCGTTTCGTT  
CCTATGTACAAAAGGGTGGCGAATAGTCACTGTGAGTACC

>RXN01155

GTGGAATCCGCATTGACCCGAGGATCATGGGCATTGAAACGGAGTATGGCCTCACCTTT  
GTTGATGGTGATTCCAAAAGCTTCGCCAGATGAGATAGCTCGAAGGATGTTTCGTCCC  
ATCGTGGAGAAATATTCCAGCTCTAATATCTTCATACCCAATGGTTCCCGGTGTATCTT  
GATGTGGGTTCCACCCGAGTACGCCACCGCCGAGTGTGATAATTTGACCCAGCTGATC  
AATTTTGA AAAAGCTGGCGATGTTATTGCAGATCGCATGGCTGTAGATGCCGAAGAGTCG  
CTGGCGAAAGAAGACATTGCTGGGCAGGTGTACCTGTTTAAAAACAATGTCGATTCGGTG  
GGCAATTCTTATGGCTGCCACGAAAACCTACCTTGTGGGTCGCTCCATGCCGTGTAAGGCG  
TTGGGTAAAAGGCTGATGCCGTTTCTGATTACCCGCCAGCTCATCTGCCGCGCCGCGCAGG  
ATCCATCACCCCAATCCTTTGGATAAAGGCGAATCCTTCCCTTGGGCTACTGCATATCC  
CAGCGCTCTGACCAGGTGTGGGAGGGCGTATCAAGTGCCACCACTAGATCACGCCCCATT  
ATCAACACCCGTGATGAGCCACATGCGGATTCCCATTTCTTACCGCAGGCTGCACGTGATT  
GTGGGTGATGCCAACATGGCAGAGCCAGCATCGCGTTGAAGGTCGGCTCCACGTTGCTG  
GTTCTGGAAATGATTGAGGCAGATTTCGGTTTGGCCAGCTTAGAGCTTGCCAATGATATT  
GCCTCAATTAGGGAAATCTCCCGCGATGCAACAGGATCCACACTGTTGTCCCTGAAAGAT  
GGCACCACCATGACTGCCTTGCAGATCCAGCAGGTGGTCTTTGAGCATGCCTCGAAGTGG  
TTGGAGCAGCGCCCCGAACCAGAATTTTCTGGCACCTCCAACACAGAGATGGCCCCGCGTG  
CTGGATCTGTGGGGTCGCATGTTGAAAGCGATTGAGTCCGGTGATTTCAGCGAAGTGGAT  
ACAGAAATTGACTGGGTGATCAAAAAGAAGCTCATTGATCGTTTCATTACGCGCGGCAAC  
CTTGGGTTGGATTGATCCAAAACCTTGCCCAAGTGGACTTGACTTATCACGATATTAGGCCA  
GGTAGAGGCCTATTTAGCGTGCTGCAAGCCGCGCATGATCAAACGGTGGACTACTGAT  
GAGGCGATTTTAGCTGCGGTGGATACCGTCTGTGATAACAACAGTGCCTCATTGCGCGGG  
CGAATCCTTAAAGCGGCGGATACTCTGGGAGTACCTGTGACTGTGATGATGGATGCGTCAC  
AAGGTCAACCGACCGGAGCCACAATCGGTGGAATTGGGGGATCCTTTTCCCTTTTAAAT  
CCTCAACAACCGAGCCCAAGAACTGCTTTGAGCATTCCTCTCCTAGGCGGAACCTCTTAC  
ATTGCCGGTGAGATTGCCACGTTGACGTTT

>RXN01167-upstream

GTGTCGTTTTTATTGTCACACTAGCAGGTAAACTGTGTGAGACGAATTCCTTTGCGGCAAC  
TTGGAGGCCGCTTCTAGTAGGCAAAGGACTGATACCTAG

>RXN01167

ATGGCAGATCGCGTTCTTCGTGGCAGCCGCATGGGCGCCGTGAGCTATGAGACGGATAGG  
GACCACGATCTGGCTCCTCGCCAGCTCGTGAAGTACAAGACCCGAGACGGGGAAATCTAT  
GAGGTTCCCTTCGCTGATGATGCGGAAATCCCCGAGGAGTGGATGTGCAAGAACGGTAAG  
CTAGGCATCCTCATGGAAGGTGAGGGAGTCAAGTCCAAGCCGGTCAAGCCTCCACGTACT  
CACTGGGATATGTTGCGTGAGCGTCGCTCAATTGAAGAGCTGGATGTGCTGGAAGAG  
CGCATCGAGGCACTTCGTAAGCGTCGTCGCAATGCAGCGAAACTGCTGAAGGCTCAGCAA  
GAGGCTGAAGAAGCAGAAAAGGCAGCTGAAGAGGTT

>RXN01167-downstream

TAATCTTCCTGCCCTAAGTTAGAA

>RXN01169-upstream

TCTTGATCGGAATCGGCGCAAACATCGTCTACGAACACCTCAGCGCGTAACCCTCGGCGC  
ATTATCCTCAGACAGCTTTTAGCGCAAACAAGGAGCATCA

>RXN01169

TTGAAACGGGTCGTTGAAGCGTGGGATAGATTTCAAATCCCACTGTATATCACGGCTCTT  
ATCGCCGGAGCACTGGTGGGTTTGCAGTGGCCAGGCTCTACAGGGGGTTTCGAAAGCGCC  
ATTAACCCAGCGTTAATGGCGCTGCTTTATGCCACTTTTCTCGGTATTCCGATCACTCGG  
ATTGGTGACGCGTGAAAGATCTGAGATTTCTCATAGTGCTCATGTCCGTCAATTTTGTT  
GCAGTGCCCTCTGGTGGCTTTTGCCTTGAGCAGATTTCATTGCGGGTGATGAGGCGCTTCTA  
ATCGGATTGTTTACTGCTGATTCTCGCGCCGTGATTCATTGATTACGTCAATTGTCTTTGCTGGT  
TTGGCCATGGGCGCCCAAGACAAGCTCCTTGGCGCCACGCCAATATTAATGCTTGTCCAA  
ATCCTGCTGATCCCCGCTTCTCGCTGTTTTTGTGGGTTTCAGATGCCCTTGGCTCAATC  
TCTTTGCGCCCATTTGTAGAAGCATTTTTCTCCTGATTCTCATTCCACTTGTTGCTGCT

GCGGGAAGCTCAGCAAGTGGCAAGAAAGTGGCAGGTAGGACGTACAATTATGGCTGCTGCA  
GAAGCAATCATGGTGCCTTTAATGATGCTGACGTTGTTGCTGTCATCGCATCGCAAGTG  
GAAGCTGTGAGTGGTCAATTCACCGATATCGCCACAGTAGTGCCACTATATGTCGCCTTT  
TTGATGGTGATGATTCCAATTGGTGGCGGGATATCCAAACTCGGTGGCTTAGGTTTCAA  
GAGCAACGAGCCATCGTTTTTAGCGGAGCAACCCGTAACCTCTTTGGTCGTTTTACCTTTA  
GCGTTAGCACTTCCCGCAGGCCCTGGAAATAGCGGCCGTCGTAGTTGTCACCTCAAACCTC  
GTGGAAGTGAATGGCATGGTTGTCTACGTGCGCATCATCCCTTAATTTTCCATGAAAAG  
CAGACATACAGGAACTTTTCAGGCATAGGGGAGTCA

>RXN01169-downstream  
TGAAACAGAACGGCAAGCTAAGG

>RXN01173-upstream  
AGATCTGTTTCTATGTATTAAAGATCACACCGAGTGGTGGAAATTCCTCAAGTGATTTAC  
CCACAATGGACTTTGTTGATACCCAATTCGAGAAAGGCCA

>RXN01173  
ATGCACGTGAGCACTCTTCCAAACAAGAACTGCGTACTCGCATTTTTCGCAGGCACCGCT  
GCCGTCGCACTGTCACTTGGTGTGCGTCTTGCTCAAACGCAGAAGATGCTGTGGATAGC  
GCAACAGATGCTGCCAATCTGCAACCTCCGCCGCGGGATCTGCAATTAACGATGCCACC  
GGCACTTCCAGCGCATCCACCACAGAGCCTTCCGGAACCTCTGGATCCGACTCCGGGTCT  
GACTCTGCTGGAGGAGACACCCTGAAGTAGAAAGCGCCGATGGGTCCACCATCAGCATC  
CCAAGTGCCTGCTCACCCTGCAATGCTGCAGGATTCAGTACCCCGGAATCCGTGGAA  
GAAGGCCCGAATGGTGAGTCATTGGTGACGTTCCCTGAAGGCTACATTGTTAACTCTGCA  
GAAGGTGGTGCACAAGCACTGGTCCGCATGATCGGTGAAACCTGGATCGGCGAAGGCGGA  
CTATCCGCGCGCAGTGGGTCTCCCAACTGGGCCTGAAGAAGCAACAACAATGGTTGGACT  
CAACAGTTTACATCTGGAGTAATTAGCTGGCTTGATGATGGATCAGGACAGTTTCGAGCT  
TCTGTTGAACCTGCT

>RXN01173-downstream  
TAAGGGAATCTCACCTGGCCTCC

>RXN01174-upstream  
ATATCGCAACCGCTGTTAATGAAGAGGAAGAGGCTCGCGATATCGCGAAGCTGTGCCAGG  
AGATGGTGGAAATTAGCTCGGAATATTGAGAAGTTGAGGTA

>RXN01174  
ATGAGCAACATGCAGGGAAACGATTCCAAGAAATCTAGCGGCGCGAGTCGTGCGGAGAGC  
CCACTGATCAAGTTCGGGACATTGATTATCGTCACTCTTGTCTATCTTGATCGTTGGTTTG  
GCATCTATTGCAGTGGGACCTGTGCTGTACCAAGTCATCATGGGACCTGGTGTGAAAACC  
GAAGGAATCCAGGCTGATGGCGCAGCACCTGCGTCCACCGACATGAACGGCACCTGGGAT  
GTTGCCCCAGGGAGTATTCCAAACACCACCTCAGCTGGATTACCTTCGCTGAGATCCTG  
CCAGGCGAAGAAAAGATCACCTCCGGCTCAACCACTGGTGTCACTGGCGAAGTGGTCATC  
GAGGATAACTCCCTGATCTCTGGTCTGATTACCGTCAACATGACTCACATCACACCGAT  
CAGGAAAAGCGCGACATCAACGTGCGCACTAAGCTCTTCCACACCGATCAGTACCCAGAA  
GCAACCTTTGAGGTTACCGATTCCGTTGATCTTTCTGCGCTCCAGACACCGGATCCATT  
GCTCAGGTTGTCTATCCAGGCGAGTTGACCATCCACGGTGAAACCAAGGCTGTGGAGCCT  
ACCTTTGATGTACTTCGTACTGGTGACCAAGTTATCGTGGCTTCCGATATCGAAATCAAC  
CGCTTCGACTTCGGTGTAGAAACCCAGAGTTCATCGCCGCAAAGATCAATGAGACCGGC  
GAGATCAACGTCCGAATCGTATTGGAGAAA

>RXN01174-downstream  
TAAACCATGATGGCATCACGGAT

>RXN01206-upstream  
CCGTGCCAGTGATGAAAAGCCGGCGAGCCGCCAAACTTGATTAAGTGATTGTCACTTTGG  
ATTGTCTATATTGGGCGAATAAACCGGTAGGATTCCCCTTC

>RXN01206



GTGAGCGCCGAAAAATACCGAGAACACAGATTCCCCATTTGAAATCTCCGAGTTTGATGAT  
CACCGACGCCCCCTCCAGCGGGCCCTCAAATTCGGTTCCATCGCCCTAATTGTCTTCACC  
CTGATCTCCCTAGCGATCTGGGGTGCAACTCGTGGCGTACCCGGCGTATCAGCAGTTGTT  
ATCGGCGCAGCAGTTGGCGCAGGCTTTGTCTCTTAACGGCTCTCAGCGTCTGTTTACA  
ACTAATTCCAACGTCACCACCACCGGTGCGGTGGTGTCTCGGTGGCTGGCTGCTGAAGATC

>RXN01210-upstream

TTGCTGCAAAACCCGCCACCTTGGAATCCGTATTTCATGGACATCGCCTCACTCGAGAAC  
ACCTCGCTGCAAAACCGCCTAGAATCTTTAAGGAGACCACA

>RXN01210

ATGACCACGTCACACACCGCCCGCGGGCTGCAACATGCAACCCCGGAGCGCCGCAAGACT  
TCATTTTTCAAACCTCTCTGTTTAAGGCCGAATGGCTCCAGTTCGCGAGAAATAAAACC  
CTGTTGTTTCATGGCCACCGTATTCCCAGTCGGAATCCCTTTGTTGCTCTTTCTCATCGGA  
AATGGTGGGGCAGCAGAGTCCGCGAACTCCTTCGACTACTTCGTTCATGTACACCCTGCTA  
TTTGTGCAGTTCTACACGGTGCTGTCCATGGCAACCACCCGCGTGATGAACGTGTGCTG  
AAAAGGCTGCGCACGGGAGAAGCCCGCGACATCGATATCATCGGTGCCATCTGTTTCCCC  
GGCGCGCTCCTCACACTGATCTTCACCGTGGTGTATTCATTGCTCATGGTTTTGGGA  
GCTCCCGCGCCCATCAACCTTGTGCCCATTGTGTTTGCCGTACTGATCGGACTACTTCTT  
TGTAAGTGCTCTTGCCCTTGATGACCAGCGTTTTACCCGAAACGCCGAAGCCGCACAGATG  
ACCTCCATGCCCCGTGTTTCATGCTTGCGATGGGTGGACTTGGATCAATCCGCTTCGTATTC  
GGCGACAGCATTTGTGGCTGATATCTTGGCCTACACCCCATTCGCCGCGATCAGTGACCTT  
GTCCAAATCGGCTGGGCTGGCGCCACCTTCGCCGACAGCGTTGGTGGAGTAGAGGCAGCA  
AACTTCGCTGGAATTTTCCAAGACATGCTCATACCACTTGGAATTCCTGGCAGCGTGGACA  
GCTGCAGCGGTGTGGGCGGCGAACCCTACATGCGCTGGGACTCGTACCGC

>RXN01210-downstream

TAAGCCTGCAGCCGACGGGATTA

>RXN01229-upstream

TAGCCCCGAAAGACGGCGAGGGTTGGCTCTGCTTCGTTGTGGGAAACTAGGCCCTTAAT  
AAGCTGTGCTTATAGGGTCTCCTGCACCGATAAAAGGACTG

>RXN01229

ATGATCATCTCCACTAACACCGCTCACCCCTGCACGAACCGCACGTACCCAGCCACCAC  
AATCGTATGAATACTCTGCGTGCCGGTGTGCTGGGTGCTAATGACGGTATCGTCTCCATT  
GCTGCGCTACTGCTCGGTGTGATCGCCACCGGCGCCAGTGACACCGTCGTGTTGCGCGCT  
GGTTTGCCCTCAACGATCGCGGGGGCGGTATCTATGGCTCTCGGTGAGTACGTCTCTGTC  
TCCTCACAGCGTGATACCGAACGGGTGCTCATCGCAAAAGAAGCGAAGGAGCTGGCCGAA  
GACCCGACGGCCGAGCACGTGAGCTGTGCGGAGATCCTACACTCCTACGGCATCTMCMMT  
GWGAMTSMRRASSMSGCSRMMA YCGRGAWMGGMASGGCGACGCCTTGGGCGCCACCTT  
CAGCTCGAGCTCGGTATTGATAATGAGCAACTGACCAGCCCCCTTGGCCGCGCCCTTCTCC  
TCGGCCGTGGCTTTCTGCTCGGAGCACTGCTGCCGATGGTGTGTTGTTATTCMTYGCCCCY  
KCAGGCTGGGACGCCGGCGTKGKCTTCGTAGTCACGSTGCTGGTCTGGCGGKKACCGGG  
TTCATCTCARCCCMGRTCYCGGGTACCTYCCCMATGCGCGSGTGCSGSGSCTTKGKGRT  
GGKGGTKCCCTCSGSCYGGCCCTGACCMTACCGTCTTGGAAWCWATTSKKSGSSGCMGYW  
KTMKGWSYKCSKSRRRAMARARRRGRRKRMKGSKKKTGKTGTYGKSGSKGKYKTKT  
CGWCGMCKSSWSRAMGWRRRTSRKCGSCGMCWCCTYSYWGMM SAYCMKSSGSSKSCWGR  
WSSRCYGCYSCMSSMGGSKSKSMSWKWTRKKS YSSSKSWSWMTWKYKTTTYCYCYCSG  
SMRGKWAMCMMMYKGGKSYWWKRRRWTKTTTYKRRRRARRMSRMYWMC SRRKWRGGCCA  
CCACTGTCAGGCGAGATTCTGCTTGCTGGCCTCGGCGGTGAGATAGGCATGGGGGAACCG  
AGGATCCCAGTGACTACTGGTGACCTGGAACCCGCGGTCTCCAGTGCCCTGGGCAAGCTC  
GGGCAGTGGCCACCGGTAGGCGGTGGCCACGGGATGATACATCGGTTCCAGAGAAGGCC  
GGAGAAAAAGGACATCAGCAGGCCACCAACCATCCTCCACCGCCATCCGCAGTGCGACCAG  
GGCGTCGGGACGCTCGCCCGGGCCCATGTGGATCAGGGAGTACCAGGCCAACAGGCCTGC  
CCAGCGCTTCGGCGAGTC

>RXN01229-downstream

TGAGAGGTCGGTAATAGTGCCGT

>RXN01231-upstream

TCCTGGGACGTCTTCCCCGAGGCGTGGGAGACATTGAAGGTTTACCTGGGCTTTCGTGCC  
CCAGGCATCGAGCACTTCACCCCCCTATGACGCCTTGCAA

>RXN01231

ATGCTGGGCTACACCTTCGTTCATCTTTATCCTGGCGCCGTTTCTCATCCTCACCGGAATA  
GCGATGGCCCCGGCCATCCGGTCCCGCTTCCCGTGGTACGTCAAACCTTCGGCGGCCAC  
CAGGGTGCACGTTCCCTGCACCTTCATCGCCATGGTGTGATGACGGGCTTGTTCATCATG  
CACGTCGGCCTGGTTTTTTGGTCCATGGCGACTACAACATGGTCCACATGGTCTTCGGCG  
ATA

>RXN01231-downstream

TGAACACTGACCGTGCGGCGCAG

>RXN01246-upstream

GGGAAGGAGGAGAAGGCTGCTGTGAGCTCTGCAGCCCCCGTCCGCTGACTTTCAATGCTT  
CATGGACTCCCCGATACACAACCTCCGAAAGGGAACCCCC

>RXN01246

ATGAAGCGCACTATCACCATCGCCGCTCTCGCCTTGACCTCCACCCTGGTTTTGTCCGCC  
TGCGCAGATAACACTGAGGGAGAAAACACCGACACCACGACCATCGCCACTACGTCCGCC  
CCCGACACCACCGAAACGACCGGGGCCACCACGGATCCTGAGACAGAGACGGGGGCGGCC  
GGAGAGGTCTCCGCCGAGCACAATGATGCGGACATCATGTTTCGCGCAGATGATGATCCCG  
CATCACCAACAGGCCGTGGAGATGAGTGAATCCTCCTGGCCAAGGACGATATCCCGGCC  
GAGGTTCATCGAGTTCACCCAGGGTGTTCATCGATGCCCAGGGCCCGGAGATCGACCGGATG  
AATACCATGCTCGAGACCTGGGAAGAAGATCCGGTCACCGGTGATATGGGTGAGATGGAC  
CATGGCGGGATGAGTGGAAATGATGAGCGAGGAGGACATGACAGCCCTCGAGGACGCCAG  
GGCACCCGAGGCTGCCCCGGCTCTACCT

>RXN01246-downstream

TGAGCAGATGACCGCCACCATG

>RXN01249

TCTCAGATTGTGGCGGTGTCTTCTCACGGTCTTACCACGATCCAGGAGATTGACGTGAAA  
CGAGCAGCGATCGCAGCCGCCGCCCTTACCCTCGCCCTCACGGGGTGTTCGGCCGCCGAC  
CCGGAACCCACCGCCGACGGGACGGTGTCCAGGATACATTCCCTGACTACCCATGGCCTG  
CCCGCCATGGACGCGGTGGAGATCATTGATCACCTCGACCGGCAGAAGGTCACTGAGCGT  
CCCAGGATCTGATCGCCTCAGTGCCTGCCGATGAAGTGTCTCGAGCGATGACCAG  
GAAGTCGTGGTTCGATCTTCCCGACAATCAGACGTATGTCTCGATCGCACCCCTACCTCAAC  
TCCACCCACGACTGCTTCTACCACAGCCTCACGACCTGCCTGGGGGATCTCGACAATGAG  
GATATCCATGTCATGATCACCGATGAAGCGACCGGCGAGGTCCTGTTCGAT

>RXN01251-upstream

TGTAAGCCGAGAGCGAACCTGCCAAAAGTAAGGGGCGGGTTCGCGGTGACGTCCGTAGGA  
TCGAGCGAAGAAACCAACAACTTCTTAGGAGCCATTCTC

>RXN01251

ATGACCCAGCCAGATATGTCCCAGATCCTCGCCCAAGCTCAGCAGATGCAGGCTCAACTA  
CAGGCCGCTCAGCAGGAAATCCTGGCAACCACCGTTGTTCGGAAATGCAGGAAACGGGCTG  
GTTACCGTCACTATGGCCGGCAACGGCGAGGTCTCCGCAGTGACCGTTGACCCAAAGGTC  
GTTGACCCCTGAAGATGTGAAACCCCTACAGGACCTTCTGCTCGGTGCATTCAAGGATGCC  
CATAACAAGGTGCGAAACGTTGCTGAAGAGAAGATGGGCCCACTATCCCAGGGCATGGGT  
GGCCTCTTC

>RXN01251-downstream

TAATTAGTTGCTAAACGCAGGGC

>RXN01263-upstream

AGTGGCCTTTGGAGTTATTTTGATGACGGTATCGGCGACTGCTGGGATCCTCCTCTTTTT  
ATCTCCAAATAGAAGCCAAGCTGCGCCACCCCAATTTAGT

>RXN01263

TTGACCCCGTATGATCCAACCGCTGTAAATAAGGAGTCGGAAAAAGAAGCAGCAAAGAAT  
CTGTTTGGCGCTGAGGCGTTGACAGTGGATCCGGATGCCGGTGAGGTTGTTGATCGAGTA  
GATAATTTTTTATCCGACGACTGCTAAGGCAAACGAGATTACCCAAGTAACATATGCAGCG  
GGTTGTACCAAGAAGTCAATGAGACTAGTCTGAGTCATGTGTTTATGGTGATAAAAAAT  
TCTGATTTTTTCTGTAGCACTTGTTCGGTGAAGTCCACGCTGGTCAATTGGCTTCCTGCCTTG  
GAACCAATTGCTGAAGCACAGGGGTGGAGATTGGAAGTTTATACAAAGTCACAGTGTCCA  
CTCATAAGCACTGCGATCAAACCTTGGTGAACTTTTTATGCAGAAATGCTATGAGTGGAAT  
GAAAAATTACTTGCTAAGCTAACGGACCTTCTGCACCAAATCATGTGATTGTAAGTAGC  
CAACGTTACGCTTCTGCAAATCCGTTAATCGATAGTGTTCGCGACGGGAACCGTTTCCGAA  
GGATATGAAATGGCATGGAATTCATTAAAAAGATGCAGGTGTTTCTATTTCTGTACTTCTT  
GATACTCCTCGGCCGCAAATTGATATCCAGAATGTGTAGCATCAAACCGCGATAATCTC  
TCAGAATGTTTCAAGTTCACCGGAGCGTTGCGCTTGGGACTGAAGCTCATCCTCAGCAAAAA  
ACTGCAGCTCAAAATATAGACGTGCCTGTATTGGATTTGAGTAATTGGATTTGTCCGGAA  
GAATATTGCTCCGCTGTTATCGGAAATGTTTTGGTATACAGGGATTACATCATTTGACC  
GCTACGTATGCTCGTAGTCTCTCTAGCGCATTATGGAATGAGTTGGTTGCCTCAAATGGT  
GAGCCTTTTAAG

>RXN01263-downstream

TAAGAGGTAGTTGTTCAAGTAGC

>RXN01266-upstream

GATTGTGAAGTTTTATATCTGTCTATTTCTGGTGATTTTCGCCCTGCTCATGAAGTGGCG  
GACGAGCAATGGCCCGATATAGATTTAGTAAGGAACATAA

>RXN01266

ATGCCAAAAGTAAGTGTGGTTACTGGTTTTTATAACCGCTGTGAGCATTTAGAACGAACC  
ATTGAGTCTATTCTTAACCAAACCTTATAGCGATTTTGAATTAATTGTTTTTGATGATGCA  
TCGACAGATGGAACAGCTTCACGATTGTTAGAGTTAAAAGAAAAATATGATGATCCGCGT  
TTCCGATTTATCATTCATGAAGAGAATAAAGGTTTCGTAAAAGGGTTATCAGAAGCAATT  
TCTGGAGCTAAAGGGCAGTATATTGCAGTCCAGGGATCAGGCGATGTATCTCTTCCTCGC  
CGTTTAGAGCTTCAGGTAGAGTTTCTAGACGCGAATCCTTCGGTAGGTGCTGTGGGTGGT  
GCTATCTATAATATTCAAGAAGATACGGGAACACGCAACCCACAGAGATTTGAAAAGCCA  
ATTGCTACATTCGATGATTTATTGACATCTAATCCGTTCACTCACGGAGAAGTGATGTAT  
CGCTTAGACCTTTATAAGAGTATAGGTGGGTATCGAAGTGGCTTTACTTTTGCTCAAGAT  
CGTGATTTATGGTTGAGGATGGCGAAAAAAGCAGATCTGGGTATCATTCCAGATTTTCTT  
TATCACCGTTACACACTTTTAGATGGTGTCTCTTTCGTCCCGGATAAACTATACGTCAG  
CGATGCTTTTTCAGAAGCTGCGGTGCGACTGGCATTAATGCCAGAAGAGGAAGGAGCTTTA  
GCCTACTCTAGGCTGGAAGCTGAAGGGCCTACTGCCGTAGTTCCCTATCGCTGATAGAGCT  
GTTTCAGAAATTTGTCCCTAAAGCGGCTATTTCGCTTATGTCTATATGGTGCTCCGGAACT  
GGTTTACACATGGCTCGAGACTATATCCAGAACCCTCTGCGCCGTACCATAGTTGTAGTT  
TTGATCAGCATCTATTCGTCTAGATTAATTAAGCCTCTTCAAGATATTCTATATAAGTCT  
ATTTTTAAGGGGTCTCGATTTCTAAACCTATTAAGAGTTCACCTCGTGAAGTTTACAAGA  
AGAATTCAAGGGAAG

>RXN01266-downstream

TAGCGAAAAACCGCATCTACCAA

>RXN01275-upstream

CGCCATACTAGGCTCGGCCTTTTCGACGGGAACTCGGATAGGCTTCTGTAAAACCATCCC  
CGTTGAAGAGAGACTCGTGGCTGAAATAACCACCCCATTA

>RXN01275

ATGGAAAAAATTCGCTCACCCGCAGTCCAATCAGATGCACTGCAGGTTTTTAAATCAGCA

CTTGCTGCGACAGTCACGTGGTGGATTTTCGGTTAACCTCCTTAACTCCCAACTACCCTTT  
 TTAGCTCCCTGGGTAGCGTTAATGACGATGCAATTCACCGTCTACCACACCTTTATCAGT  
 GGAATTCAGACTGCAATTGCTTCTGTTCATCGGAGTTGGACTTTCCTTTGTCATAGGCACT  
 TACTTAGACGTAACTGTGTGGACTTTTGGCCTTGCAATGGTCATAGGATTAATAGGTGCA  
 CGAGTACCAAAGCTCCGCGCGGAAGGAATAGGTATTGCTACTACATCCATTTTCTTCTT  
 GCCTCCGGGTTTGATGATCAACAACCCCTTCTATACGACCGTATTTTAGAGATCCTGCTC  
 GGGCTGGCTGTTGCCATAGCCATCAACCTCATCATCTTTCCTCCCTTACGCGACCAGGAG  
 GCAAACATGGTGGTAGGAACTTAGATCGGAGGATGGGTGAGGTTTACAAAAAATGGCC  
 GATGAGCTTGCAGAAAAGTGAATATCGACAATGCAGATGAGTGGCTGGAAGAAATTAAT  
 TCTATTAACAATGACCTAGAAAAAGCGTGGCACTCCGTGCGGTTTCGTTTCGCGAAAGCCGT  
 CGAGTTAATCCTCGTAAAAATCCGCATCCAAGAGGGCCGCCCCAGCCTACGGAAACAAGT  
 TATGAATCAAACCTCACCAGCATTTGATGAAGGGATCGCTCATTACGCCACCTTGCCCGT  
 ACTCTTCGTGATACCCCGATTATAGATTCCGACTGGGGATCCAGTATTCAGCAACAGTG  
 GGATACCCCTTATGCACGATGCCGGAGCTTTGCTCGCAGATCCGAATCAGGAAATAGATCC  
 TATCCGCGACCGGCTCTC

>RXN01275-downstream  
 TAAACTTTCAAGTGAGATGAGTG

>RXN01276-upstream  
 TGCCTAAAACCTCATCACCATGCTCGCGACCACCGCGATCGCCTTTTCGCCATCTCAC  
 CAGTGCAGGCGCAAACCGTGGACACAGACACTGACGCCTC

>RXN01276  
 GTGTCTCTGAGCTGAGCAGCGGCACAAGCTCAGGAAGTTCAGAGGATTCCGAAGATTCT  
 GACATCTCCAACCGGGACATCATCTTCGGCATCGCAGCTATCGCTGCAGTCGGCGGACTT  
 ATCGCAAGTGGTGTGCACTGGGCAGTACAACAGCGCATGATCCCAAATCCCCTCCCAGGA  
 ATCATTTCAAATCCCCCTGCACTGGCACCTCAGGCGCTGCCCCAGCACCTGCTCCCGCT  
 CCTGCCCCCTCAGGCAGTCGCGCCCCAGGTTGTCGCTCCCCAGGTTGTCGCGCCTGCTCCA  
 GCCCCAGTACAGACCAACCGCACCTACAAAACTGCACCGAAGTATGGAACGTCCTGGGA  
 AGGTCCATCCGCCAAAGCGATCCAGGCTACGGCACACACCTCGACCGCGACCGCGACGGC  
 ATCGGCTGCGAATCACGCCCTAGG

>RXN01276-downstream  
 TAGTTTGGGTTTTGGGGATCTTC

>RXN01281-upstream  
 GGACAACCTCATCAAATGCAAACATGCGCCACCGCGTCCCGGAAAACCAGGGGCGATACC  
 GCGCTTGAGTGCGAGGTGCCGTCAATTCCCAACTACAAGA

>RXN01281  
 GTGGGACTCAGCCGTTACATTATCAGCTAGCCGCAGAAAACACCAAATCCCTTGTTAGA  
 ATGGTTCCCATGACTGTTCTCAAGGAAACGAACCAGCAAAGAAGCTCGCCACTGACCTT  
 AACCGAAACCAAGTCGTGGATGAACCTTCTGCAGCTGTTTCCCGAGGTCAACTCACTTTG  
 GAGGAATTTGAAGATCGCTCCTCCAAAGCATGGAATGCCCGCCACTTAGACACTCTTGTA  
 GAGCTGATCTCTGATGTGAACGACAATCCCTACACTCTGCTTGGTCAGCAATTTCCCGGC  
 GCCTCCTATGCGCCGGCGGCCTACGAGACCACTCCCCCAGCGATGCCCAATGTGTCAGAT  
 CCTGTAAATATTGTCCGCAACAGGATTACCGGCAACCCGAATGGCTCCAAAATGTGGGT  
 TCGTTTATGGGTGGCACCGTGCAGCAAAGGTGGATGGCATGTGCCTAATGTTTCACACATCC  
 TTCGCCATGATGGGCGGCAATCAGATCGATTGCGCGACGCCTTCCTGGAAAGCGACCGC  
 ATTCAGATCAACGCCTACACATTCATGGGTGGCATCGAGATTATTGTTCCCGAGGGTGTT  
 TTTGTCAATTTGTGATGGCATGGGCATTTTCGGCGGCTTCGAACAGTCTGTGGACAAGGCC  
 GGTGCACTCAATCCCGCGCGCCTGCCAAGCAACGCGCCACGGTCCACATCAAAGGCCTG  
 CGTTTCATGGGCGGAGTCAGCGTAGTCACCAAGAAAAACATT

>RXN01281-downstream  
 TAAAAAGCTTGTGACGCGCCCC

RXN01296-upstream

TAAAACTCCTGTTTCGAAATTGCCAGACAGGTGTCCACCAACTGCTACATTGCATTGG  
AGATCCAGAATCGATCACTCTACGACCAGGAAAACTTTC

>RXN01296

ATGTCCATCGAGCAAGCAATCACTTCACTCTCCGCAAGAGTGC GGGAAC TAAAGCCCATC  
ATCGAGACTGAAGAAGCCACCAAAACCGCACTGATCATCCCCTTTATCAGCAACGTTCTC  
GGCTACGACGTCATGATCCTCGTGAAGTCATTCCGGAATACACTGCTGATGTTGGCGTC  
AAAAAGGGTGAGAAGGTCGACTTTCGCTATCAAAACCGGCGATGATTTCCACTTCCTCATC  
GAATGCAAAAAGGTCGGCTCCCCACTCAGCCTCGATCACGCTAACCAGCTCGTCCGCTAT  
TTCAATGTACACAGACACCGAATTGTCATTCTCACCACCGGCGAAATCTACCAATTCTAT  
GGACAACTCGATGCAGCCAACCGCATGGATGCAAAACCATTTCATGACCTTGGATTGTAAC  
AATATTGATGCCCCGTAGTTCCCTCATTGGAATGTGTACCCGCAAGCATTTCACCCCA  
CAAGCGCTAGCCGCCAACGCTGAAGAACTGAAGTACATTGCTGAATTGAAGAAAGTCATC  
GCGAATCAATTCCAAGAACCTGACGTAGAAATCGTCAAGATGCTTGC GGCGACAGTCACC  
ACAAAGCGTATGACTGCACAAAATCTGGAATTCTTCACCCGCTTGGTTAATACTGCGTCT  
TCCAGTTCTCTCAAAGACGAGGTCAATCGTAGATTGCGCTCCGCCAAGTCTTTGAGGAT  
CCTGTCCAAACACAAGGTGCTGATGCAGAAACACCAGCAGAGGACGAAGCAGTAATCGAA  
GAAGTGGTTTCAGAAATCGTGACGACAGAAGAGGAAATCCACGGTCATTCAATTGTCCGT  
GCAATTTGCTGCTCAGAGGTATCGGCACAAGAAATCACCATGCGTGACGCAAAATCCTAC  
TGCGCTATTCTCTTCCAAGACAACAACCGAAAGCCAATCGCCCGTTTCTACTTTGATCGC  
AAGATTCCACGCATCGGCATCTTCAATGCTGAAGGCGAGCAGGAACACTTTGATTGGA  
TCCATCGAAGATATCTACAACCACGCTGATCTTCTGCATTCCCGCGTCGTAGCATTGAAC  
GCT

>RXN01296-downstream

TAAAGTTCTGCCTTTAGTTCTGCA

RXN01301-upstream

AGGCAAGAACGCAAAGTTCTAGTACGCTGCTAAAGTATGCAGCTTGGCCCGCACGGTTTC  
CGCGTGCGGGACGTGTTTCTGTATAGGAAAACTACC

>RXN01301

TTGATCGTTGATACCCAGTTTGAGAAGATCCCTGCTCACGACGTCGTGGGCATCCGGGTA  
ATCCTTTCTCTGAGGATCTCCCTGAGCTCTTTAAACGCGGCTACGCGGAAGTAAAGAAA  
TTCTCCGCCTAGAAAGGCATCGAACCTAAAGGTCTTGCCCGCGCCTACTACTTTGGCGAT  
GTCTCTGACACCGTAGACATCTGATTGGTTTCCCCGTGACCCCGCGCAAGCAGAATCC  
CTGCGCCGCGCGCATTTAGCCAATCCGGTGCGGACATCGATGACGTTGTCTCCACCAC  
TTCCGCGACATGAAAACCATGCACAGCCGCCACTCCGGCCCCCTCGATGGAGTCGAGCGC  
GTCTGGGACGAAATCTCGATGAAGTCGAAGACCTCGGATGCACCTTGCCATCCAGCAGC  
ATCGGTTGGGAAGAATACATCGAGGGCCAGCCACCGCTGATACCTGCGACCAACTGGCC  
TCTGAAGTTTATGTTTCAGGTGTGCCAAGCACCGGTGAAGTCTGCA

>RXN01301-downstream

TAAAGATTACCCCGGAATTTCCC

>RXN01306-upstream

TGTTTTAGAGGTAGAGCGAAACGTGCCTGTAAAACTGGCGCTCGCTGTGCTCGAAGACCA  
CCCAGACAATCACCCCGCTCCGAAGGAGAATCGCTAAGCC

>RXN01306

ATGACTGAATGGTATGTGTTTTACCCGCCACTATTCTACTCATCGCGCTGTCTGCGTTT  
TTCGTATCATCTAGATTTCGCTTTGCTTGCACTAGGCGGAACCGGTTAGAGGAGACTGTG  
GAAACCTCGCGGTCTTCCCGCGCTGCGTTGCGAAGCCTCAATGAACCTACTCTCATGCTC  
GCGGGCGCGCAGTTGGGAATCACCATGGTGACTTTTCGCGTTGGGTGCTATCACGAAGCCG  
TGGGTTTCAATTATGCTTTGATGCCGCTCTTCGAATGGGCGCGTATACCGCTGGTTATGGCA  
GATGTCAATTGCGTTTATTTTGTGCTGTTTATCGTAACGTTTCTGCACTTGGTCATCGGC  
GAAATGGCTCCGAAATCTTGGGCAATCGCGCATCCGGAGACGGCACTTCGAACTATCGCG  
ATTCCCGCACGGGGCTTCATTAACCTGTTTTCGTCCATTGCTGCAGTGGATCAACAAAATG

GCGAACGATTTGGTCCGCAAAGTTGGTGAAACTCCCGTTGATCGAGCTGCAGCTGGTGGC  
TATGACACCGATACCCTCCATGCCCTCATTGAGCATTCCCGAGAACTGGCGCTCTGGAT  
CAGCAATCCGCGCCGCCCCAAATCAGCGGAATTATCAAGCTGGATAAAATCACGGTCGGTCAA  
ACCCTGACCGCATCTCCATTTACGCACAGCGCCAGCGCCACGGTTGCTGAGGTGCAAGCC  
GCAGCTCAGCGCAGTGGCAGCTTGCGTGTGCTTATCGACGCCCCCTCCACCTTTTCCCA  
CACGTCATTCATGTGCGAGACACCCTTGGTGCCTCGCCAGACGAGAAGGCTTCGAAGTGG  
TCTCGCCCAATCCTCACCGTTGCTGAGACCGACACGTTACACCAAGCGCTGGAATACATG  
CGGGAGCATAACGAGCAGATCAGTGCGGTGCTTTCCGCTGATGGGAAAACGGTGCTTGGT  
GTAATAACTTGGGATCACATCTTGAAATACCTGTGGCCTGCATCGGTG

>RXN01306-downstream  
TAGCTAATTTGAGGTGCGCTGAA

>RXN01324-upstream  
TCCTCAACCCAATGCTTGCCGGCATTGCGATGGCCTTCAGTTCAGTTTTCGTCTCTCCA  
ATTCTTTCGTCTGCGAGGATTCAAAGCAAGGAGCAACTA

>RXN01324  
ATGTCCAACAGCGAATGCCACACCCACGGTTACATCGAAGAAAAGCAGCGTTACCTCGCA  
CGCCTCAAAAAGAAATCGAAGGCCAAACCCGAGGCATTCACCGCATGATCGACGAGGAACAA  
TACTGCATCGACATCCTCACGCAGATCTCCGCAGTGAACCTCCGCACTCAAAAACGTGGCG  
TTCGGCTCCTCGACGATCACCTCGCTCACTGTGTCAAAGAAGCAGCTGACCTCGGCGGC  
GACGAACCTCGACGCAAAACTCAAAGAAGTTTCCGACGCCATCGCCCGCTTCAGTAAGGCC

>RXN01324-downstream  
TAAACGGATCCGGTGGCATTGGA

>RXN01326-upstream  
GTCTTGGAGGTGCTTACACTCTACTTATTGTAGAAATGGGAGGGTCGTGGCGTCGAAAA  
GCAAACATCTTTTAACGCTTTTGGCCCGTATTATGGTGGC

>RXN01326  
ATGGCTTTCCCCGTGACAGAAGACAAAATCCTGGCAGCTGAGGAAACCCTTGGCAGGCGC  
CTCCCCGAAACTTTGCGCGAAGCACTACTTCAAAAACAATGGTGGCGAAGTCATCGACAAT  
GAAAACAACGACTGGATTCTCCATCCAGTTCGTGATGACAGCGACCGAAAAAGGCTTGTC  
CGAACTGCCAACGACATCATCCGCGAGACCGAATCTGCACGTGAATGGGACAATTTCCCC  
GAAAATGCGATCGCAATTGCAAATGACGGAACGGGCGACTTAATAATTCTGCTTCCCGAC  
GATGATGCTTTCTACATCTGGTTCGCACGAAGATGAACCCCTGATCGAAACTGAACTTGAG  
GATGCC

>RXN01326-downstream  
TAAAACAGCTGGACAGAATTCGA

>RXN01331-upstream  
CTAAACTCGTCTCTCGTATCTTTCAGTCATTTATGTCTGATAAGCAGGCGCGTGCGCCAC  
ACAATTGGCACAATCACAAGAAAGTGAAGTGGGAACCTAG

>RXN01331  
ATGCTGACGACACTATGGATTGCGGTGTTGGTATTTACCGTTCCAGGATTGGTCGTCTCG  
TGGGTTTCTGGCCTTAAAGTGCCCTGGGCTATCGCAGCCTCCATCCAGCCACCTTCGGT  
ATTTACGGCTGTCCGCTGGTTGCTGGGCTTGTGGGAGATGCGTTTTGATCTCCATTCT  
GTAGTTATTTCCACATTGGTTTTCGCTGCGGTTGCTTTGGTATGGCGCTTGTTTTTGTC  
GGTGGTTGGCTTGACGTGCGCGTAAAGCACGTATCCGCAGGCAGACGCTCGCGGATGAA  
GAGCGGGCAGAAAATGCTGAGGTATCTGCAGGGGAGCCTGCCGAATCGAGCACAAACGAA  
GCAGCCGAATCTGAATCTGAAACCTCGGAGCGTCGCGGAATCTGGCGCGTGATCTTTGAT  
TACATGCGCGACGGTGGCATCTTGGATCACCGTTGGCTGCTGCCTGCCGAGGTGCTATC  
ACTGGTGCCTGGCTGATCATTTGATCGTGGCTTGATCTGCTCTTGAGCACCAGCATGGT  
TTGGGCGATATCGTCCAAGGCTGGGATGTCCATTGGCATGCTTCGACTGTCCGTTTTATA  
GATGAGACCGGATTTGCGTCATCCACGATGATGGGGCAGCTGCGCAATATTGAAACGCG  
CAAGATCTGTTCTACCCAAGCGCATGGCATGCTGGTGCATGGGTGCTGTCCGATGTCCGA

AATCTGACGATTGTTGAAGCCACCAACCTCACTGGCATTGTGCTGTCCGGATTGTTGCTG  
CCGTTAGCTGTTGCACTGATTGCATGGCGGATGATCAACAATCGTGGACTGACCGCGCAG  
ATTGGTGCGGGCTTTGCTGGACTGATCACCATTGCCTCTCCGGTACTGTTCTGGGTGGT  
AACTACGTGGGTGCGTGGCCTTATGTTGCTGCGATCGGTGCTTCAGGTGTGGTGCTTGCG  
CTGTTTATGTCCACTCCGTCGTGCGCGTAAGAATCTTTGCCGAGCATTTGGCGTTCATG  
GGTATGTTCCAGCTGCATCCAGCCCCATCCACCATCGTGATCATGGTGTGCTGCTGTGG  
TGGCTGCTCAAATCGTGGTGGTTCGAAGCCAGAAAGTGAAGGGCTGGAAGGCGGGCATC  
GGTATCCGTTTGAAGGATGTCGGCATCCTGGCCATCACGGGCATCATCGGTGTGCTCTTC  
ATGCTGCCTCAGGTGATTTACAGGTTCGAACAAACCGAAGATGTGCTGTGCATATTCGCT  
GAGGAACAAGTCAACCGCAGCGAGTCCCTGGTTGGTGTCTATTTTCATGGAGACCGGCCAT  
GTTGATTTCTTCGAAATATTGACATCGTCCCAGTGCTGGTATTCGCAGCAATCGGTGGC  
GTGGTTGCTTTGGTGTGGCGCGAAACTTGTGGGCGCCGGTGTTTTACTTCGCCAGCGTT  
GCGTTGACCGCTAACTCGCTGAAGCCTTTTGAAGAGCCGTGGGGTGATTGGCTCAACATC  
GTGGGCGGTCTGCATTACTCCACAGGACACCGTTTGATCATGCCTGTGCGCATGTTCACT  
TTTGCTGCCCGAGGTATCGGCGCTGCCGAGTGATCCGTTTGATCTGCTTGGGACCAATA  
AAGAAGTTCACCACTGTTTCCGGTGTGTTTCTGTGGTGATGGCTCTGTTGTGGCTGTG  
CCATTGCAGACTTGGGCGAAGGATTTTGTAGAGGAAGGATCCGAAACCACAATCCTTGCG  
CCACACAATGATGAACGTATGGTGAGCAACAACGACTTGGCTGCCTGGGACTGGTTAATC  
CAACAGCCAGGTGGAGCTGACATGAACATCATGGGTGACCCCGCAGATGGTAACGGCTGG  
ATGTATGCCTACAACGGCTTGCACTCCGTGGCCCCGCCACTATGCATGGCCAGCAGCAGGC  
GAAGGCTCTGCCACCGCGATGCTGTTCTGGTGGCCTCAACTTCTAGGTGTGGGCACCGAT  
GAAAACCCAGATCAAGTCAACGATGTGGATCAGGCTGCTCGTGATCTCAACGTGCGGTAC  
TTCATGATCAGTCCGTGGACGTTCTGGGATTTCCAGATCCCCAACTTCCGCCAGATCGAT  
CTGCTGTGGCAAACCCAGGCGTGACACCGGTGTGCAAGAAGGGCGACTCGGTGATCTTC  
GCAGTCAACGATATGTTCACTGACGCCGAACCTGGATCAGATGCGTGCACCTGGTAATTCT  
CCAGAACCCTGCCAGAGCTTCCTACCTTGGGCGAGCTTGGGTGGCTGAACTGAAGAC  
GAGGTAGATCAGACTTATTACCATCGTCCAACGGTTCTGCTGGTGTGAACTCAGAGATG  
CCTTCAGCCGAACTCTGTATGCACCGGATCCAACGAAGCCGCATACGGTCCCTAAC

>RXN01331-downstream  
TAATCACAAAGAGTATTCAGTAA

>RXN01337-upstream  
GCTGGCTATCCTCAATTCCGCTCGGGTGCCTGACGCGGAGCGATTAGTGATTTTGA  
TACGCAAGAAAAAGTTTCTTAGCAGGGTAACCTAAATGTC

>RXN01337  
GTGACATTTTCGAGGCGGAAACACTGGCGCAAAGCACGCGGTGCTTGTGGTTCTGGCCCC  
AATGGGTTGACCAACGCGCGCGGTGCTGGCCAAAGCAGGTGGCAAGTAGATGTGTATGAG  
GCGGCGCCAAACCTTGGAGGGGCGGCGCTCAGAAAGCGTTCTGGGGGAGGGGACTATC  
AGCGATTTGGGTGCCGAGGGCATCCTTTTCGGGTGGCAAGCCAGCTTTTCACTATTTG  
GGTCTGGAAGATCACGGCTGGAATGGGCGTATTCTCCCTTTGCGATGGCCACCGTTA  
GATTATGGCAGGGCCGACTGCTGGAACGTCCTCCAGAGACCGCCAAAAGCTTGGA  
CCTGATGCACGTCGTTGGAAGAATTTGCACCAGGGCTTAACCAAAAACATTGATAAACAC  
TTGGCCAATCTATTAGGGCCGGTGCTGAAATGGCCAGCACATCCGATTCGGATGGCAAAG  
TTTGGCCCATTTGCGTTGCTGCCCGCGAAACGTCAGCCAGTGCCGCTTTTGAAACAGAA  
GAAGCCCGATCCCTGTTTATCGGTTTCGGCGATGCACTCGGTGACTCCACCACACAAGCCG  
ATGACCGCATCACTTGGATTGCTTTTTCGGCGCTCTGGGGATGTCGCGAGGATGGCCGGTT  
GCAGTTGGGGGAAGCGGACGGATCGTTCGATGCTCTGGTCAATGTCATAAAACCATCACGGT  
GGCACCATTCACTGCGATTACAGATTGATTCCCTCTCACAATTCCGCGACACCGATGCC  
ATTATTTCTGAACCAACCCCTCACAGGTGCTGAAACTCAAAGGAAGTACCTTAATGCA  
GGGCTTCCGCAACGCATGAGCACCTGGAACACGGACCAAGTTCTTACAAAGTGGACTAC  
CTCCTTGACGAACCAATTCCCTGGAGCAATCCCCAGGTAGGCCAGGCCACAACCGTCCAT  
GTGGGCGGAAGCTCTGAGGAAATCGCTTTTCGAGAAAGCAGAGTTCGAGCGGGGCGGATG  
CCCGAACGCCCCGTTTATCATTTTGTGCCAACAAAGTGGCGGATCCTTCACGCGCCCGG  
GAGGGGCGCCACGTCGTGTGGGCTACGCGCATGTGCCGCGGGGTTTCGTCGATAAGCGA  
GCTGCTTTATTAATCACTGCGCAGATTGAACGCTTCGCCCCCGGTTTCCGTGATCGCATC  
GTGCATTCAGTGGATACCAACGCGGAGGATTTAGAGGCGTGGAACCCCAATCTTGTGGC  
GGAGACATCACCGCAGGGTCCGCGCTGCTTCGGCGAATGCCGACCAAAATCGGCGAGAAA  
ACGTACATGGCATCCGCTCCAACGCGCCGGGCGGGGAGTCCACGGAATGCCCGGCTGG

TGGGCAGCGCAAGCCGTTTTAGCAGATCACAGG

>RXN01337-downstream  
TAGAATTGCGACATGGAGCCAC

>RXN01351-upstream  
CTGGAGATTTCCGATTTCCAGCGCGCCCGCATCGACGCGAATGCTCAGGAATTGCAGGCC  
GAGCGCGAGGCAGTGC GCGACTTGCTCTAATCTTTAACGC

>RXN01351  
ATGACTTCGCTTTTCGACGCCCCAACCCTCCAACGCGTCACCGTTTTACGGGCTCGGGC  
CTCGGCAGTTCCCTCGCTGTACACGCAAGCGGCTCAAACCTTGGCGAAAACCGCGGTAGAC  
CGCGGCATCGACTTGGTTTACGGTGGCGGAAAAGTGGGGCTCATGGGTATCGTCGCGGAT  
GCGTTCTTGGAATCAGGTGGCGAAGCCTTTGGCGTCATCACGGAATCACTTATGAAGGGT  
GAGCTTGGGCATGAAAAGCTCACCGAAGTTGAAATCGTTTCTGATATGCACATCCGCAAG  
CGTCGCATGGCAGAACTTGGCGATGGTTTTATCGCCATGCCCCGTGGCGCCGGCACCTTG  
GAAGAACTTTTCGAGGTCTGGACCTGGCAACAGCTGGGCATTTCATCAAAGCCCGTCGCA  
CTTTATGATGTGCGATGGTTTTTGGCAGCCCCCTGCTGGAAATGCTTGAGCAGATGACCCAG  
CGTGGATTTATCAAGCGAGACTTCTTTGAGTGCCTCATCGTGGAATCCGACCCGCATGCC  
CTGCTAAAGGCAATGCAGACCTGGACTCCACCAGCACCAAAATGG

>RXN01351-downstream  
TAACTAAATTGTGTGCTCGACGG

>RXN01362  
AAATGGCTTGGCAGCCTGCGCAGAGCTTATTCTTAATCCCCCAGTTACCCAGCATGCT  
CGCACGGGCACCCACCTTTATGATTCCCTGCAGCTGCTGTTCACTCTGGTGGATAAAGGC  
CACCACCCAACAGATGCTAAGGCTGTAGCTTTTGATGCCGAGGCTGGAGAAGAAGGCCTG  
CACTTCCGCAACCTTTCAGCGGATCTCTTCCCTCCCTGCAGCCACAGAACTTATTGATCGA  
GTTGGTCTTTCCAATGAAGCCCTAAACAAGGTCTTGGAAAACCTCCTGCTCTCCCGGGTG  
CAATCCGGTAAAGACCGCGGCTTTATCTCTATGCCACCTTGGGTGTTACCGAGCTTGGC  
CAAGTTTATGAGGGTCTGATGTCTTATACCGGCTTTATCGCCAGGAAGATCTTTTGTAG  
GTTGCACCATATGGCAAAGCCGATAAAGGTTCTTGGATGCTCCCGGTCTCAAAGGCTGAT  
GAAGTCCCTGCCGATAGCTTTATCGAAGTTGATCAAGAAGCCCTGGTGGCGGCGTAATC  
AAGGTGCGTAAACGCCACCCGCGCGGATCATTTGTGTTCCGTCAGTCTCTCGTGACCGC  
GAACGCTCAGCGTCTTCTACACCCACAAGTACTCACCAGCTTTACTGTACCCAGGCT  
ATTGAAGAACTCCAGGCATCAAAGCGCATCACCACAGCCAATGATGTTCTCAGCCTCACC  
ATCTGTGAACCTGCCATGGGTTCGCGCGCTTCGCTGTGGAAGCAGTACGCCAATTAGCA  
GAGCTTTATTTGGAATTGCGCCAAGAAGAACTAGAGCAGCAGATTCCAGCGGAAGACCGT  
GCCAAGGAACTCCAAAAGGTCAAAGCGCACATTGCGCTGCACCAGGTTTATGGTGTGGAC  
CTTAACAGCACTGCTGTGGAGTTGGCGGAAATCTCGCTGTGGCTAGACACCATGAATGCA  
GAAATGGAGCGACCTTGGTATGGCCTGCACCTGCGTAATGGTAACCTCCCTCGTTGGTGCC  
ACCCGTTGCTGTATGCACCTAGTCTGCTTAATAAAAAAGCCTGGTTAACTGCTACTCCA  
ACCCGCTATCGGCTTGATGATATCGCGCAGGCTATTGATGAAAACAAAGCAGAACCCCTC  
TTCAACCACGGCATCCACCATTCTCTTGCCCTCTACTGGCTGGGGAGCCACTGCAGAT  
GCCAAAGATCTTAAAGATCTTATGGCTACTGAAATCAAGGAGCTTAAATCTTGGCGTACT  
TCCATCCGTGCGTCTTTGAGTAAAACTCAGATTAAGCAGCTCAATAACCTTGCCCTACGC  
GTGGAAAACACTATGGCGATTTGTGCTGATGCGTATTGCGATTGCAGAAATCCAGATCTCA  
CGTAGCACTACTCTCTGGGGTCAAGAGCCAGCTGAGGTTTCGGAGGTTGTACACGTGAG  
CAAATTGAACAAGACCTCTTTGGCAATATTGATGGTGCATATAACCGTCTACGCTTGGTG  
ATGGATGCTTGGTGTGCGCTGTGGTTCTGGCCTTTGGATGCTGTTGCTACCGCTGAGCAT  
CCGGAGCTCCAGCCCTTCCAGATCTTGATGAGTGGCTAGCCACCCTGACGGAGATTCTG  
GGTATTGATCTCCCTCTGAAGTCCAAAAACGAAAATCAGATTGTCTTAGGTCCAGATACC  
AATTGGCTAGCCATTAATGATGCCGAGGCTACTGATCTTGGTTTTCTGGGGCATTGAGC  
TTTGAGCGTGTAGCGCGAATCACCCGTGGATCAATGTTGCCCGCCAAGTGGCTAAACAA  
CAGAGCTTCTTCCACTGGGATCTAGACTTCGCCCACGTTTTTGGCAAGGGTGGATTTGAT  
CTGCAGGTTGGTAATCCACCATGGGTGCGACCAGATGTGAACCTTGAGGATCTGCTTGCT  
GAACATGATCCGTGGTGGGCTGTAATGAGTAAACCAACCCAGGCATCCAAAAAAGAACGC  
CAGAAGAATTTTCAACAACCTTAAGAGCCTCGAACATGTGGTCAGTGGTGCAGGTGAA  
CCCGTGGCTACTTCTGCGATCCTCGGTTGCTTACTCTCTATCCGCATCTTAAAGATCAA  
CGCCCGACCTCTACCGGGGCTTTATGGAAGAGACTTGGTCTAATGCCTCCCCGGCAGGT



GCGATCTCACTGATCCACCCGAATCCCACTTCACTGAGAAAAAGCTGCCCGCTACGT  
CGGGGAGCATATGAGCGTCTGCGCCGCACTGGCAGTTCATTAATGAGTTGATTCTTTTT  
GACGTCCACGACTTGGTTAAATATGGCGTACATGTCTATGGCGCTCCGCAGGAATCTATT  
AACTTTTTAAGTGCTGCGTCGCTTTATCACCCACAAACAGTGCTTGATTCATTTGATCAT  
GACGGTTCAGGTAATCTCCCTGGTCTTAAAGACGACAATGGCAACTGGGACCGTCGCCCCA  
CACAAGGACCGTATCCAACGGTCAATGCCGATACTTTGACGGTGTGGAAGTCCATCCTG  
GAGGATGAACAAACGCCATACCTGGATACCCGCATGGTTTATACCGTCAACACGGAAGCA  
GCAGCAGCGTTGGAAAAGTTGGCTTCTGCACCTCGTATCAAAGAACTCGGGCTGCAGTTC  
TCCAGTGGCTGGAATGAAACCACCGATAAGAAAAAGGGATACTTTGACGTTGGTTGGGGC  
TACCCAGCTTCTGGTCTGATGCCATTTTGCAGGGGCGCACCTGGGTGTTGCTACACCA  
ATGATCAAGCAGCCCAATCCGACAATGAAGCATAATCAAGATTGGTCTGAAATTGATTTT  
GAGGCCATTCTGCAAACCTTCATACCTGCAACGGCGTACCAGCCCGATCGCCAAACAAAG  
CCCCTTATGATGCTGACTACGGCACCTGGACTTTTGGGGACAAGCAGGTACCAGTTGCA  
GACACTTTCCGAATTGCATGGAGGGAGATGGCTGCCACCACGGGATTTAGGACTGTCTAC  
CCATCAGTAATTCCACCGGGAGCCAACCATGTGCACACAGTTAATAGCGCTGCATCACGT  
TCAAACCTTAAACCATTCTCGTTGGAGCACAGCTTGGTGCAATTCTAAGTGACTATTTT  
GCTCGGTCTCGGGTTCAGGCCACATATTTAACGACATTGTTTCGCAAGATTCCACTTCCA  
AATTTTACATCCTTGGAAAAGCAGTTCGCCCCGACATACCTCCGCCCTCAACTGCCTGACC  
TCAGCTTATGCCCCATTGTGGGAAGAGATCACCGGTGAGCCGTGGGATGTTTCAAGTGCCT  
TTGCGCAATGCCGAGCAACGTGAGCAGCGCAAAACGATATTGATGCCATGGTGGCATTG  
TCTTTGGGTATTAGTGCTGATGAGCTGTGCATGATTTATCGCACTCAATTCCCAGTGATG  
CGTAGATATGATCAAGAAGATCATTTTGGATGCCAATGGCCGTAAAGTTCTTAAAGAGATC  
ATCAAGCTGCAGCAGAACTTAAAGATGGCCAAGAGCTCAGCGTGGAAGCGCACCTGG  
GTGCATCCCCAATCAGAAGTGCTCTATACCTTTGAATATCCTTTCCGGGTGTTGGATCGT  
GAAGCTGATCTGCGTGCTGCATATGCAAAATTTGAAAACCAGCTTAAGGAGCCA

>RXN01362-downstream  
TAGAGCGCTTATGTCTCACTCA

>RXN01379-upstream  
CAGAAATTGAGTAATGCTCTCGAGCCAGACCGTGAACCTTATTAGGCCTTTGGCCGTCATT  
CTTCCGCAGCCCGCAACTTTGAACACCGAGGTTTAAACACA

>RXN01379  
ATGAGTGCATTTGATTTCGATCCTAAATGTTGAAGAGTGGATCAGTGACCACTACCTCACC  
AATGACGATGCCAAAGGTGCCTCATTTTCCAAGCGGTGCGCGAGCGCATTAAGAATGG  
AAAACCACCGAGGACGCAACCCAGCAGAGTGGCCCTTAACTCGTTTTTCCAGCAACCGC  
CTGCAGTTGCAGCATGCTCTTTCTGAGCTTGACGACGCCACCACCGCCGCGAGTTAGTG  
GCCTCTGCACTGGGGTATGGTGTCCCCAGCGCGCGCCACGCGCAGCGCGCTCCGACACA  
ATATCCTATTCCTCTTGGGTGGGAAATGCCGGCAGTGTGGAATTTCTTGACGCGACTCCC  
GCTGAAAGCTTTGAAGAGAATTCAGATCCCTTCCCTTGAGCCAGTAGCGGTCAATGAC  
AAGCCCCAGGATATCACCGCAGCCAAATTTGGTGGGCCAGATTTTCTTAGTGATACTCCC  
CCTGCTTTTGTGTTATCACCGCTGGTAAATGGGTGGTTTATAGCCGAGCGTGAAACCTGG  
CCTCTAGGCCGCCACCTAGCTATTGATATTTCCCTGGTGGTGGAAACGTAATGACACCAAA  
GCCAGGGTGAGATGCAGCAGACGGTCGTAGCACTAGCCCGCGAAAATACCGAGCGTGCC  
GCCGATGGCACCACCTGGTGGGAAGAAACCATGAGCAATCCCGCGAACATGCTGTCAAG  
GTTTCTGGCGAGCTACGCAGTGCGGTGCGTGAAATCCATTGAAATCCTGGGCAATGACGTG  
CTCACACGCTATGAAGCTAAAGAGCTCTCCACCGCTGAGATCGACGGTGGCGAGCTAGCT  
AAGCAATCTTTGCGCTATCTCTACCGCATTTTGTTCCTGCTTTTGGCCGAGGCTTCACCA  
GAGCTTGAAATCCTGCCAACCAGCACCCCGGAATATGACGAG

>RXN01390-upstream  
CGTCCAGATAATCAATCTGCGAAGCCAGTGGCTTCCGAAGCTCCAACAACCTATTACGCCG  
GCAAGCTCTGGTGCATTAGCATCCGATGCTCCGACGTCTT

>RXN01390  
ATGTTCAAGCGCAGCCTTCCAGCAACAAGACATCCTCAGCAAGTTCCGCCAGCTCCGCC  
GACACAAGTTACTCAGTCAGATTAGGCCGTCTTGAAGAGCCTGGTTACCAGCCAGACCG  
TCTTATTCGGAGCCTTACACTGACTCTGATTTTCGCGCCAGCAGGTGCGGCCGCTGCGCCA  
GCTGCAGTAGCTCCACCAATGATTGCGGAACAGCCACAAATTTGTTGAAGATGCCCGCCGA

GGTACCCTCGATTTTCGGCCTGTTGATTATCCGCGCAGTCATTGGTGTCTATTTGATCGTC  
CGTGGAGTCTTTACATTCTTCACCCTTGGAGGATCTGCCGGTCTTGCTGGCCTCGAGGCA  
GAGTTCGCTGGTTACCAGTGGCCTGAAATCCTCGCGATCCTGCTTCCATCTATTGAACTT  
GCGGCTGGTGTCTTCTGCTCCTTGGTCTGATGACCCCACTGGCAGCAGCGGTAGCCACG  
GTGGCGACATCCTTTACCACCCTTCACCAAGTCAACACTCATGAAGGTGGTTGGGGTGAA  
CTTAGTGAGCCATTGATGCTGGCACTGATCCTCACTATCGTGGTGTGCGACTTCAGTTC  
ACCGGCCCCGGCAAGATTTCCCTTGACTCTGGCCGAGGTTGGCAAAGCGTCCACTGG

>RXN01390-downstream  
TGAGCTCGTGGATCTTCGTGGTC

>RXN01391-upstream  
ATGGTGTGAAACCATCATGGCTCGATCACAAAAAGAACACCTGCTATCAGGTCAACCAA  
AAAAGTTAAAGTGTAATATCCAGCATCATCACGATTGCC

>RXN01391  
GTGGCTGCAGTCGCTTTTGCAGCTTACGTTATAGATGGTGGGGTAGAAGAGGCGTCTGGA  
ACACCGACGTCTTCGGAAGCTCGGTAGCGGCAACTGCTCCAGCGGCATCTAGCGAGACT  
GCGGCTGAATACCGTGCATGCTCGCTTCCCTTGACGTTAAAGGTGCTGCGCCAGGAACA  
GGATATGACCGCAATTATTCGGACCAGCATGGACCGACACTGTTTCCGTGGAATATGGA  
CACAATGGCTGCGATACCCGCAACGACATCCTGCAACGCGACCTGGATGACATCCAACCT  
CGCGAAGGCACCAAGGATTGTATCGTCACGAGCGGCCTGCTCAGCGATCCATTTCTGCG  
GAACCTATTGATTTCTGCTCGCGGTGAACGTTCCGGCGACGTGCAGATCGATCACCTGGTC  
CCATTACATGACGCATGGGTCAAGGGAGCACAGCAGTGGGATGAGCAAACTCGAAAGAAC  
TTTGCCAACGATCCCGACAACCTTCTCGCCGTTAAAGGTACGCTTAACCAGCAAAAAGGT  
GCAGGCGATGCAGCAACCTGGCTTCCACCAAACACAGCTTTTAGGTGCGATTACGCAAAG  
AAAATCATCACCGTTAAAGATCGCTACAACGTGTGGGTGACTGAGGCTGAAGCAAGCGCC  
CTGGAACGCCAATTAGATACGTGTGCTGCA

>RXN01391-downstream  
TAACAGTCACATAAGCATTTGGG

>RXN01400-upstream  
GAGCAGCTATCACCTTATGCATCGGCTCCGGGTGAGGCGGTGCCGGTGTCTTTGATCA  
GCAACGACATGTGGGTGCCGGCGAGCGACCGGGTAGTTGG

>RXN01400  
ATGGCGATTAGTGTTTCTATGCCTAAGGCGATCAGCCGTGAGGAATTGGAGCGCGCGTGG  
CTTGAAGTGATTGAACGGCACCACCTTGCGCACAGTATTTAGCACGGGAATGGGTGGG  
GAAGTGCAGCAACACCGCATTTGATGTGGGCCCCGGGAAAATGGATTGACCACGCCGTGGC  
CCTGGTGAGAGCAATTAATGAGGCGTTGCGGGCGGTGTTGAATCGGCAGTGTTCGCCGTAC  
TCGAGGCCATCGCATAGTTTGTGCATTATTGATGCGCATCCGCGTCCACGGTGATTATT  
GGTAGTGATCATTCGCATGTGGATATGTGGTCCATGCTGGTGATTGTGCGGATTGTGTG  
GCTGCGCTCGATATGGAACCTCCCGTTGAGCCGCCGTGGCGTTTGAATCGCACACCGCG  
GAACTCCTCGCGGTCCACCTGCACCGGAGCGGATTCACCAGCGGTGGCGTGAAATTTTG  
GAAGCTGGTGGTGGAAAAATGCCTCAGTTCCCCGCTTCCGCTTGGCGATGCCATCTCCATG  
CCTGAACGCGTTGAAGTCCGCGACATTTTCGGGGTCAATGGCTTGGCGATTACTCGGCA  
CGCGCCCGCGCACAAACAGGTAAGCTCCCTGGCCTTGACTATTTTCAGTGATGGCTGATGTT  
ACGGCGGCGTGGCGGACCTTCCGTTGCGTGCTGATTCCAGTCCATAGCCGTTTCGAT  
CAGCGCTGGCACGATAGTGTGCGGTGGTTTATCTCCAATTCGGTCATTGAGGTGCCAGAT  
TCCGATCCTCACACTGCAGCCCAAGCTGTTTCGCGAGGCTGTTTCTTTGGGAAGCTACCCG  
CTGGCTGAGCTGCTTGAACCGTGGGGTGGCATGCCGGAACGCCAGGAATGTTTGCTATT  
TCTTGGCTTGACCTGCGCCGACTCCAGTGAGCATTGACGATATTGGCCTCCAAGCCCAG  
TATGTCAGCGCTTCACTGCGCACCGATGGTGTGATGCTGTGGTTTATTTTGATCGCTCC  
GGCGCGACCTTCGCTGTCTGTTATCCTGACTCTTTGGTGGCGCGGGAAAATGTAGGCCGC  
TGGATTGATGCGATTGTTGCTCAGATGCGCGCCGAAGCTGGGACGGTGAATCTGCAGGCC  
GGCGGGGAACAGCTGACACTTCGGCATGGAACTCGCGCCGATATTTCCGAGATCGCCCCG  
CTACTTGCCCCGAAACGCACTGACCCCTGTGAGCTGGTGGATCTTGAACATGCCCTTGAC  
CTGCTGACACACAGCTTTCGCAATTTCCCTGGCGGTGGTTTCGAAACGCTCGTGGCAAGATA  
ATCGCAGCGATGCAGTTGACTATTGTTCCGGAGTTTTCGCGCGGTGGTGCCTTCATCTT

CACATCGAGGGGCCGTTTCATTATTCGGAATATCGCACCAACCGATTGGATAAAAAGCTG  
CGCGCCTGGGCTGTGGAGCATGGGCGTGC GCGAGGGGTGAAGGTGAGGAGGTGGTGGGA

>RXN01400-downstream  
TAGTTGGTTTATTGGCGCCTCGT

>RXN01403-upstream  
GTGCGTCGCATACGGTGAATTATCTTTCGGCGGATCGTTTCCGCACGGTGTGAGTTTCG  
TAGAGTTTGC GCGCATCGCGGTATTCAGGAATTCAGCCA

>RXN01403  
TTGGTGC GCGTTCGGGGCTATTTCAATGCGGTGGATATTTATGAGACCTCCACGCAACCT  
GACCAGGAATTTCCCTTTCGATTTTGACACTTTTTCAGCCGACCCACGCGTTTCAACTC  
TCTGCGGTGCGTGCCGATACCGGCGAGACCGTTTTCGGGGCAGGGAAGACACCCCGGAT  
TTGAGCGCTCTGATGAAGCGGGTTCGCGCGTCTGCGACCATGCCTGGTTTCATGCCGATC  
ACCTACATCGACGGCCATCCATATGTCGATGGCGCGGTTCGGGAGACCGGCGGTTTGATG  
CTACAGCCGGCCATCGATGCGGGCTTCACCCGCTTTTTCGTTATCGCCTCCCGTCCGCGC  
GATTATTGGCGCAAGGAGATCGGGCGCCCGGGTTTCATCAAAGCTGCTTTACGACGTTTC  
CCCACAATCGCCGACCTCACCATCGCGCGTCTGCACTGTATAACTCGGTAAAGCAACAG  
ATCCTCGACCTAGAGAAACAAGGCAGCGCTATGTGTTCTTTCGGGACAACATGAACATC  
CAGAACACGGAAATCAATCTGAAGAAATCCGTCATCTTTCGATGCAGGCATGCAGCAG  
ACCCGCAAGATTGGCCGGAGATCATGAGCTTCTGAACCAAACCAGA

>RXN01403-downstream  
TAATGAAGGTTTTTAGTCCAACCT

>RXN01409  
TGGGTGGATTTCCCCGACGTACCCGCACGTTTGGGGTATGAATACATGCAGCTGACCCCT  
CATGTAGATTTCCGTCCTTCTTCCGCCACCCCAAGGCAGACGATGATCTCGTGGCAGCC  
CTGAAAAAGCGTGCCAAGGATGCCGGAGTCACCATTCCTGCACTGTTGCCAGTGCAGCGT  
ATTTCTTGGCCGGAGGAAACCCAGCGTGTTCAGCAGTACGCAACATCAAGCGCATCATC  
CAGTTGGCCGTTGATCTGGAAGTAGACACCCCTCAACACGGAGTTTCTGGACGCCCAGAA  
CGCTCCGAGGATTCGAAGATGCCTTCTACCGCTCCATGGAAGAACTCCTGCCAATCCTG  
GAAAAAGAGGGCATCAAGTTCAACATCGACCCACACCCTGATGATTTCGTGGAACCGGT  
ATTGAAGCATGGCGAGTCATCCGCGGTCTGAACTCCAAGCAGGTGGGCTTTGTTTACGTG  
GCACCTCACTCATTCACATGGGTGATCAGGCTGAGGCAATCCTGCCAGCAGTAGGCGAT  
CGCCTTGGGGCTGTGTACCTGTGACATACCTTCGACCACCAAAATCCACGCGCTGCGC  
TACATCACTAACCCTCCAGGCAACGCAGTGC GCGTGCACCAGCACCTAAAAATCGGTGAT  
GGCGATGTGAACTTTGAAGAGATCTTCTCACTGCTGCGCTCTACCGGTTACCTTGACCGT  
GAAGATGCACTGTTGGTCTCCAACGTGTTTGAGAGATGAAGCAGCAGATGAAGTATCC  
CGCTACCAGCTGGAGAAAATCCGCTCACTCATCGAAAACGCA

>RXN01409-downstream  
TAGAGTTATCTCGAAACTACCAA

>RXN01422-upstream  
AATGCATTGAAATCGTGATCGCCTGTTATTGTTTTGTACGTGCAATAACAGTCCCACAAC  
AGTCCCCCAAAGGTGCGAGCGGAAAAGGAGAAGCAAAC

>RXN01422  
ATGGCTCAGCGAAAACCTGGCCTCTGTGATCGGTGCAGCATTTGGCAGCATCTGCTGTACTG  
GTTGGATTAATGACACCCGCAACAGCACAAAGTAGTGGCAGCTCATCAACAGACATCACT  
CGAGCACTACCTCAAGTGTTGGTGTGGCTGATAGCCGTGCTCCTGAAGGTGGCGCAAAG  
GTCCGTTGTTTTTCGGTGACTCCACACCTCTGGCACCATGCTCCATTCCGTACCGATGAG  
CGTGGCTGCCCTCAAGGGTGCAAACTGGGCAGATCAGCTGCAGTCTCAGCTGGGACTT  
GGCGCGGGAGACCTCATTGATGTCTCCTGCTCCGGTGCATCGATCAACTCTGATGGATTC  
CACTTCTCTGATGAAGTCCGCCATGCTGAAGCTCGTGGCGCAATCGGCCCCAACACCACC  
GATATTTTTGTTTCAGTTGGGCAAGAATGATCAGTGGGGCCTTTCCAATGTGAACCTTCTG

CAGTCTGTTTCAGACCTGCTTGACTGATGTGTTTCGCTGGTTGTGGCGATGCTGCGGTTCGCT  
GCTGGCAAGATGCAGGATCCAAATGCAGTTACTGCTGAAAACATATGCAGAGCGCATGAAG  
CCAGTCATTGACTACTTGAAGTACTACGCACCAAACGCAGAGATCACCTTGGTTGGTTAC  
CAGGAATACACCGCTCGCAGCGGAAGTCAGGTATGTGTTTCGCTTGGTGGAAACCCACTG  
GTGAAAAATGATGCACCTGCGCTGGTTTCGTTTCATGAACAAGTTGGACATGGCGATTGAT  
GGTGTCTGCTGGAATCCTCGGCGTCAGCCACGTTGATCTGCGTAGCGCGACTGAAGGGCAC  
GACAGCTGCTCCAACGATCCTTGGGTCAACGGTGTCTTTGATGCACGTGCAGAAATCGTC  
GGCGGTCCGTGGCAGCCATCTGTTAAGGGAGACTCGGTTACTGCAGGGATCCTGCGAGAT  
CGAGTAAACGCC

>RXN01422-downstream  
TAAAGATGACGTGCGAAAAGCAT

>RXN01434-upstream  
GGTTTCCTGCGCACCGTGATGATTGGTGCGGCGCTGTCGCCGGCCATCGCTTCGGCGTTC  
AACACTGCCAACACGCTGCCCAACCTGATCACTGGAAATC

>RXN01434  
GTGTTGGGTGCGGTGCTGACATCGCTGGTTATTCCGGTCCCTACCCGCGCGGAAAAAGAA  
GACGCCGACGGCGGTTCGGGTTCCTTCAGGCGGCTGCTCACCTGTGCGTGACGCTGCTG  
GGTGGTGTACCATCCTGTGATATCGGCGCGCCGCTGCTGACACGGATGATGCTGTCC  
TCTGAGGGACAAGTCAACGTGGTTCATGTCCACGGCCTTTGCGTATTGGCTGCTGCCACAG  
ATTTTCTCTACGGCTGTTTGCCCTGTTCATGGCTGTGTTGAACACCCGTGAAGTGTTC  
AAACCCGGCGCTGGGCACCTGTTGTCAACAATGTGATCACCTTGACCGTGCTGGGCGTG  
TACATGGTGCTGCCTGCGCGTTTGCACCCGCATGAGCAGGTGGGCATTTTGTATCCGCAG  
ATCATTTTCTCGGCGTGGGCACACCTTGGTGTGGTTGCACAGTGTCTAATCATGATT  
CCGTACCTGCGTCGCGCGGGCATGATATGCGCCCTCTGTGGGGTATCGATGCGCGTTTG  
AAGCAATTCCGTGGCATGGCGATGGCGATCATCGTGACGTGGCAATCTCCAGTTCCGGT  
TACATCATCACCACTCGCATTGCGTCGATTGCAGACGATGCTGCGCCGTTTATTTATCAG  
CAGCACTGGATGTTGCTGCAAGTTCCTTATGGCATCATCGGCGTCACCTTGCTCACCGCG  
ATTATGCCCGGACTTCCCGCAACGCGGAGCAGCGCGATGATAGGGCAGTAGTCTCTGAC  
CTTCAGTTGGGTTCGAAGCTAACCTTCATCGCACTGATCCCCATCGTGGTGTCTTTCACC  
GCCTTCGGTGTCCCTATTGCCAATGGCCTTTTTCCTACGGCCAATTCGATGCCAACGCC  
GCCAACATCCTTGGTTGGACTCTGAGCTTCTCTGCTTTCACGCTGATTCCCTACGCTTTG  
GTGCTGCTACATCTGCGTGTGTTTTATGCGCGTGAAGAGGTCTGGACCCCAACCTTCATC  
ATCGCCCGCATCACCGCCACCAAGGTCTGTGCTTTCCTGTGGCACCGCTGCTGTGAGC  
TCCCCGGAGCGTGTGGTGGTGTCTTGGTGGCGGCAACGGTTTCAGTTTCATCACCGGC  
GCGGTCTACGCGCGTATCTGTGCGCAACAACTCGGCCGTGTGGGTATGCGCTCTTTG  
GCTAAAACCTCCCTGTGGGCGTTGGGCTCTGCGGCGGTGGTGCAGCAGCAGCATGGGCG  
TTGGGGTGGCTGATTCAAGCCGTCTGGGCGATTCTTGTGCTGGGCACTCTAAGCTCCGTA  
GGCTACTTGTGTAACCTGGCTGTGTTGGGTGTCTTCTTCATCTTCGTCACCGGCATCGTG  
TTGTACAGTTCTGGTTTGCCGGAGGTCCAAACTTGGGCCAGGCATGACCCGCATCCCA  
GGTTTGAGCCGGTTTATTCGCCCAGATACCAAGATCTCTTTGGATGTGCGCGAAGTCTCC  
GAGCAGGATTTCTCCACCCAGCTGGTTCGCGCCAAGCGAGTTCGCAGCAACCCCTGTGCCG  
CCACCGATGTCCGCCGATTTGTCCGCGGACCTCGCCTGGTTCCCGGCGCCCCAGTCGGC  
GACGGTCTGTTCCGTCTGCTCGCCGATCACGGCGGCGTCCAAGGCGCGCGTTTCTGGCAG  
GCCCCGAGATCGCCACCGGCAAGGAAGTCGCGCTGATCTTTGTGGATACTTCCGGCAAC  
GCCCCATTTGCGCCACTGTCTTCGGCAGCCGAGCGGGCATCGCCTACGAGGTGCAGCGC  
CGCACCAAGAAGCTGGCCAGCTTGGGCGAGCTTGGCGGTAGCCCCCAACATCCACTCCGAG  
GCGTACCGCAACGGTTGCCTCATTGTGGCCGATTGGGTGCTTGGCTCCAGCTTGAGCGCC  
GTGCGGGAATCCGGTGCCGATCCCCGCGCCGCGCTTCGCGCTCGCGGAACCTAACTGAA  
ACCATCGGCGAGGCCACGAGATGGGTATCCCGGCCGGCTTGGACAACAAGTGCCGAATT  
CGTATCAACACCGACGGCCATGCCGTCTCGCCTTGGCGGCGATTTTGGCCGATGCCTCA  
GAGCTCCGCGACGCCAAGTCCCTGGCCTCGGCCGCGGAGATGCTTATCGACGCGACCCCTC  
GCTCCCAGCGACGTCAAGGCAATGGTCACTGAAGCCCAGGGGCTAGCTACAGAAGACAAT  
CCCATTACGCATCACTTGCCATGGCGATGCGCACCTGCGGACTGTTACCGGAGGAACCA  
ACCCACCTTGTGGTGAAGAAGGAAAAGACACCAAAGCCTGCGACACGTGATGGTTTCGGT  
GCTCCGACTACACCTGCAAGGGCATGGCAGCCATCGCCGCTGTGGTGATCATCTTGGTT  
TCCCTGGTGGCCGCCGGTACCGCTTCTCACCAGCTTCTTCGGCAGCAGCAACCAACGAA  
CAATCCCCGTTGGCCTCTGTTGAAGCCACACCTCTGCAACACCAGAACCTGTGGGGCCA  
CCGGTCTACCTGGATCTGGATCAAGCCCGCACGTGGGATGACGGTGCAGGAACAGATGTC

ACCGACGTCACCGACGGCAACACCTCCACCGCATGGACCTCCACCGGCGGCGACGGCCTC  
CTAGTTGACCTGTCCACGCCTGCCCCGCTCGACCGCGTCATCTTGACCACCGGCACCGGC  
TCCGACAGCAACGTGACCTCGACCGTGAAGATCTACGCATTCAACGACGCCTCACCACAC  
TCCCTGTGCGAAGGCATCGAGATCGGCACCGTGGATTATTCCGGCCCGCAGTCTCAGCCAC  
AGCATCCGCGATTCTCCAAGCTTCCGGGTGAGGTGGAATCCGTGGTGATTCTGGTCGAT  
GAGGTTCTGTTCTCACAAACCTCAGACACCAATCCACAGATGCAGATCGCTGAAGTACAA  
CTTGTTGGTTGG

>RXN01434-downstream  
TAAATTACGCGTTTGTGATTGAC

RXN01448-upstream  
GTAATCTCAGCAGTTAAAAAGGGCAGTTCCGCATCAGGGGGACTGCCCTTTTTCGTGTCT  
TCTCATGCTCTTGTGAATATGCATAGCTAATCTTGAGGCC

>RXN01448  
ATGGCAAAGAAGAAACTGGGGACTGTGCGCCAGACTGTCTGAACTGGATAAGTCCCTGCGC  
AATAGATTGCTGCGGGTTTCGTTCCCGACTGCTGTTTATTGTTTCAATCCGCAATTGGTGCG  
GGTGTGGCGTATTGGATCGCCGTGGAAGTGATCAAACACGGACAACCGTTTTTCGCACCG  
ATGTCCGCGGTGATTATTTTGGGTCTCTCCGGAGGAGACCGCATCAAAGAGCCACGGAA  
CTCACCTGGGCTGTGCTTTAGGCGTTGGTTTGGGTGATTACTGATCATGCAAATCGGC  
ACGGGCTATTGGCAGATATTTGTGGTAGTTGGATTAGCGCTGCTGGTGGCCTCGTTTGT  
TCACCGGCACCGTTGGTGAGTAATCAGATGGCCATTGGTGGCATTTTGATTGCCACGATG  
TTCCCGCCAGGTGATGGTGGAAGCATTGACCGTATGATCGACGCCTTCATTGGTGGTGGC  
GTGGGAATTTTGGTTCATCGCACTTCTTCCCTCATCTCCTCTTGACGCAGGCCGGCATCAA  
GTGGCCAACGTTTTGGGGATCGCAGCTAGTGTGCTGGAAGACGTGGCAGCTTCCCTAAAA  
GCCAAGGATGCAGCCAACTCAACAATGCTTTGGAAGCATTGAGAAGGTCGCAGGCGTCG  
GTGAACAAGCTGGAACTGCGGCATCTTCAGGCAAGGAAGCAACCACCGTATCGCCATTT  
TTATGGGGAGATAGGGCCCCGCGTGAGATCGCTGTATCGCATCTTGCGCGCCAGTGGACAAC  
GTCATCCGAAATGCTCGAGTCTTTGCGCGACGGGCAGTGGTGCTGACCGAAGACAATGAC  
ACCGTCAGTGATGAACAAATCCACGTGATTGAGGAAATCGCAGACATTGCACTGCGACTG  
TCAGACCTTTATGAGCACCACAAAGAAATCAGTGAAGCACTGGAAATTCCTGAGTTGGTT  
AACCGACTGCGTCAACTGGGCGAGTGAAGTGGGCGAGGACATCGCCGAAGATCGAGTGCTA  
TCCGCACAAGTAATTTTGGGCGAATCGCGATCCATCATTGTGGACCTGTTGCAGATCTGC  
GGCATGTCCAGGGAATCTGCGGTGGCAGTGTGGTTCCGACCTCAGAGAGTCCGGCTTAC  
CCTCCGGAGCTGTGGGATGACGAAGAC

>RXN01448-downstream  
TAGCCTTTTATCGCGGTTCCGTT

RXN01459-upstream  
GATTGCGCGATTACGAATATCCACCCTACAACCTGTGTTTCGCTTACAGCGTTGTTTCGGA  
TCGTAGCAATAGGAAATAGTTGCCTTGTAGATTGGTAAAT

>RXN01459  
ATGAACTCTAATGGCTTTGGTTTCTCTTTTGGCAACAACGATGACGACGATGACAAAAAC  
CGCAACAACGACCCATTTCGGCCTTTTCGGTGGCAACTTCGGATTTCGGAGGACAAGGTGGC  
GCTGGTGGCCCCGGCGGATTAGGCGATATTTTAAACCAGTTTCGGCCAGATGCTGTCCGGA  
ATGGGAGATTTCGATGAATCCCCCGAAGCAGCAGGCCCCGGTTAATTATGATTTAGCAGCA  
CGCATCGCCCCGCCAGCAGATTGGTTCGCGTAGCGCCGGTGAAGGATTCTGAGAAGGAAGCA  
GTGGAAGAGTCCCTTCGCCTTGCTGAACTCTGGCTCGATAACGCCACCCAGCTCCCCACT  
TCCGGGCACCGCGTCGAAGCGTGGAATCCAGAAAACGGTTAGAAAACACCCTGCCTGTG  
TGGAAGCGTCTTGTCTCCCTGTTCGGGAGCAATGAACAAAGCCCAATTAGAAAACCTC  
CCTGAAGAAGCCCGGAGATGATGGGCCCCGATGTCTTCTTTGATGAACTCCATGTCTTCG  
ATGAACTTCGGAGTTCAATTAGGAAATGCGCTGGGCGACCTCGCAAAGCAGACCCTCACC  
GGCTCTGACTTCGGTTTGCTATCTCCCCAGTCGGCGTATCTGCCGTCTTGCCCGGCAAC  
ATCGCCGAAGCATCCAAAGGCCTCAACGTGGCACCAGCAAGAAATGCTCGTTTACATCTGT  
GCCCGGAAGCCGCCGCCAACGCCTCTTCAAGCAGTGGCGTGGCTTGTGAGCGCCTCG  
TTCTCTCCGTTGAGGAATACGCCGTCCGCC

>RXN01459-downstream

TAGAAATCGACACCTCACACATT

>RXN01460-upstream

GCAACATCGCCGAAGCATCCAAAGGCCTCAACGTGGCACC GCAAGAAATGCTCGTTTACA  
TCTGTGCCCCGGAAGCCGCCCAACGCCTCTTCAAGCAC

>RXN01460

GTGCCGTGGCTTGTCTGAGCGCCTCGTTTCCTCCGTTGAGGAATACGCCGTGGCCTAGAA  
ATCGACACCTCACACATTCAAGAGGCCATGGGCAACTTCCAAATGGACAACCCAGATCCT  
GAACGCCCTCCAGGAAATGATGAACGAAC TCCAAGGTATGGACCTGTCCCCACGCATCGGA  
TCCCGCAACGCCAACGCAGTATCCCGCCTGGAAACTCTCCTCGCACTCGTCGAAGGCTGG  
GTGACATCGTAGTTACCCAAGCCCTGAGCGAACGCATTCCATCACCGACGCCA

>RXN01460-downstream

TGAACGAAGCCTGGAAGCGCCGC

>RXN01471-upstream

CCTCCAACCAGAGCTATAAAAAAGGTTGTAGAAGAAATTTCTTAACATACATCGTTGTGT  
TGCCAGGGGTTTAACAGATTAGTTGCTAAGGTCTGTCTCC

>RXN01471

ATGCAGAGTTTTTAAGACGCTTGAATCTTGGCCTGTCGACAATGTTTCGGCCAGTGTCAATC  
TCCGACGGCGCCGTGCAC TTTTACGGCGACGTGATCGTGT TTTTGAACATGAGTGTG  
ACAAAACCTCTGGCCACCTACGGTTTCCTTGTGTCATCGAAGAAGGTGTTTGTGAGCTC  
GATTCACCGATGGGTCTGAAGGATCCACAGTGAGGCATCTGCTCTCACATGCTTCCGGC  
GTGGCATTCGATAAGCCGGTAGCGGAAAAGGGAGTGGGGGAGCGCCGCATTTACTCCTCT  
GCTGGCATGGACATCTTGGCGGATGCTGTTGCCGCTGAAGCTGAAATGCCGTTTGCAGAG  
TATCTCCGCGAGGCTGTGTTTCGAGCCTTTGGGAATGGAGAACTCTGAACATGAGGTTCT  
GCGGGCCACGAGGCGCGCAGCACAGTGGCTGATCTGACCAAGTTTCGGCCAAGAGCTCACC  
GCACCAACTCTGATCTCACCAGAAAACCTTGCAGAGGCTTTCCAGGTGCAATTCCCGGAA  
CTGATTGGCACCGTCCCGGTTATGGCATGCAGAAGCCGTGTCCGTGGGGATTGGGCTTT  
GAAATTAAGGGACAGAAGTCGCCGCACTGGACAGGTGACTTGATGCCGGAAGAACTGCT  
GGACACTTTGGACAGTCGGGAACATTCTTTTGGACTGTTCCAGGCTCAGGTCAAGTCGGG  
GTTGTTTTGACTGACCGAAATTTCCGTCCTTGGGCTAAACCGTTGTGGACTGCCTTCAAT  
GACGAAGTCTGGGCCGAGTTAAATTCA

>RXN01471-downstream

TAAACTTTTGCCGTAATTACGGT

>RXN01479-upstream

AGCGCTGCCCCGTGCCATAAATTTTGAAGAAGCGCGAAACAGGTAGAGTCTAAGGTGTCAT  
TCTTGGTACAAGTTTTATATTTAGGGAGAGTTATCCACAC

>RXN01479

ATGATCCAGTTAGTGATAGGCGCTGCAGCAGGCTACGTGCTTGGCACAAAGGCCGGCCGC  
AAGCGTTACCACCAGATCAAAAAGGGATATGAGGCAGCGATTAACTCCCCCTGCCACCAAA  
TCTGCAGTAAACGCCGCCCGCAAAGCCATTGCCAACAAGCTGGATCCGCAGCCCCGCATG  
AAGGAAGTAAAAACCTGCGGACTGCGGACGGGCATGAAGTCCTCGAGCAAGACCAGGAC

>RXN01479-downstream

TAAATTACCCTCTAAACGCCCCG

>RXN01484-upstream

GAGTTTACTCTTAACCGCAGTAGTGCAGCCAGCCCTGAGGGTGGTGGCGTATTCGATGCT  
CAGAACGCCTAATAATCGGCACAAAATTGATTCAATTTTG

>RXN01484

GTGTTGGGCACAGCTCAATATGATGGAGTTCCATCGAGGCAGTTTGCTGCTCGTTTGAGG  
CATGCCGCGAAGCTGTGGCGTCTTCATGAAATCCAGCATGTATATACTGTCGGCGGAAAA  
CTTCCTGGCGATCGTTTACCGAAGCAGAAGTCGCGCGGGAGTATTTGATCAAAGAGGGC

GTGGATCCGGATCTGATTTTTGTCTCTGCAGTTGGCAATGACACTGTCTCCTCCTATGAG  
GCGCTTGATCCGGAAAAGCTTGGTCGGGTGCTGATTGTTACTGATCCGAACCATTTCGTAT  
CGGGCGGTGCGCATCGCGCGACGCATGGGCTTTGACGCGAAACCTTCCCCGACAACCTAT  
AGTCCCGCGAAGTTTCCGTCGATAGTTTATTTTCTGACCTTGTCCTCATGAGTGGGGCGGG  
GTAGTAGTACAGGACGTGTGCGGGCTCTTGGGTGAACGGGTGCCCGATAAGGTGAAGCAT  
CTTTGCGCGCAATCCAAGTCTGCTGCGCCCTTCGCGGCGTGACGCCATGAGCAACTTC  
GGAGGC

>RXN01484-downstream  
TGAAAAAGTAGATGTACCCCTAT

>RXN01485-upstream  
CTCAGGGCTGGCTGCACTACTGCGGTTAAGAGTAAACTCTTGGCTAAAAATCTTCTCACG  
TTAACTAGTGTGCCAGCTGGACTCGTCTAAGGTGGGGACC

>RXN01485  
ATGAACTTTAGTTTGGTGCATCTTCGGGAAAACGTCCGCCGTGTATCGGTCACTGTGGCA  
ATTGGAGCTGGCGCGCTCCTTATCAGTGGACCATTTTTTACTGCTCACACTGCAGAAGCC  
ACAGAAACATATGTCTTGGCTGAATCACCAGAATTTTACCAAGACAATGTCACTGACTAC  
ACCGGCCAGATTTCCCTCGTCCGATATCACCAACATTCAGGCTGCCATCGATGATGTAAAG  
GCATCTGAACAAAAGGTTATTTTCGTTGTTTTCTTAAGCTCTTTCGACGGAGTTGACCCT  
GAAACGTGGACGCAAGCACTCCAAGCCAACGGCGGCGGAAACGTCTTGATTTATGCA  
CTCGCTCCCGAGGAACGGCAGTACGGCATCCAAGGTGGTACTCAATGGACCGACGCTGAA  
CTCGACGCCGCCAACAACGCTGCTTTCCAGGCACCTTCCCAAGAAGATTGGGCAGGCTCT  
GCACTAGCGCTGGCAGAATCAGTTGGTTCTAGTTCTTCCAGCTCTTCGGGCTCGTCCAGC  
TCTTCCGATTTTTTCGGCGCTTGGTTGGCTGCTGCGGGCGTTGGCACAGTGGCCGCTGGT  
GGCGGAATTTGGGCCCTATTCCCGCAGCCGCAAGAAGAAAACAAGTGTGCAACCTTGAA  
GATGCACGCGAAATCGACCCGCGCGATACCAACCGCCTCATGCAGCTTCCCATGGAAACT  
CTCGAACACCTTGCCCAAGAAGAGCTCACCTCCACTGATGACTCCATCCGTCGCGGAAAA  
GAAGAGCTCGCTATCGCTACCTCCGAGTTTCGGACCAGAGCGCACCCGAGCTTCAACCGC  
GCCATGAACCACTCCACCGGCACCTTGCAAAAAGCCTTTGAGATTACAGCAGCGCCTCAAC  
GATTCATATCCAGAAATCCGAAGCCGAACGCTCAATCCATGCTGGTAGAAATCATTTCATCC  
TGTGGCCAAAGCCGACGATGCCCTCGACGCGGAAAGCCCAAACTTTGCCGATATGCGCAAC  
CTGCTGATCAACGCGGGCAGCAAAATTGGATGCTCTCACCCAAAAATCCGTCGACCTGCGC  
ACCCGCCCTCCCAAGGCCCAAGAAACACTCGCTGGCCTGCGCACTCGCTACTCAGCAGAG  
GTCCTTGAAAGCATCGACGACAACGTGACCTCGCCAGCGCTTCGCTCGACGAAGCAGAA  
GAAGTCCTGCCACAGGCGTACGAGATAGAGTCCATGCCCGCAGGCGAGCAGGGCGGGCTT  
ATCGACGCGATCCGTCACATCGAGCACGCCATCACTACCGCAGACAAACTCCTCGCGGGC  
GTCGAGCATGCCGATGAAAACATCTCCACAGCCAAAGCAAACGTTGCCGATCTGATCCAA  
GAAATCTCAGACGAAATCAACGAAGCCGGCCAACTCAAACAAAGCGCAGGAGCCGACGGT  
GCCCCTGCCGACTGGGCCTCCCTCGACGATGCTGTCCGCGCAGCCAGCGCAGCACTAATC  
ACCGCATCAGCAGACGCCGAAAAGGATCCGCTCGGAACCTACACAGAACTTGTCGATGTC  
GACTCCGCCCTCGACACTCAACTTGACACACTTCGCGCCACCGCAGCTGATCAAGCCCGC  
CAGCTACGCGTATTTCGACCAACAGCTGCAATCTGCAAGAAGCCAAATCCAAAAGGCCGAA  
GACCTCATCTCCACCCGCGGTGCGATCGTAAATCCGAAGCCCGCACCCACCTGGCCAAC  
GCACAAAAGCTGTACGCCATGGCACAACAAAACCGCACCCGCGACACCCGTGCAGGAATT  
GATTACGGACGTCAAGCAGCAGTCGCAGCCCAACGCGCCAGCAAGTCAGCACAAAACGAC  
ATCACACCTACAACAATCGCCACAATTCGGGTGGCGGAACCACCGGTGCGATTGTCACC  
GGCATGGTGATCAACTCGATTCTCAACAGCGCCGCGGTGGCGGTTTCTGTGGAGGCGGA  
GGCTTTGGTGGAGGCGGTGGCGGCTTCAGCGGTGGTGGCGGTGGCGGAGGAGGGTTCCCG  
GGAGGCCGCTTC

>RXN01485-downstream  
TAGCCTGAAACGAGCAAAACCAA

>RXN01492-upstream  
TGAAGTGGGCGGTTAGCTTCGGCGCGTGGCAAACCACATTTGCTGGACTGCAGGCATAA  
TGGACAAAGACTTTTAGCAACAACATATGTGGAGGTGACAG

>RXN01492

GTGACCACAACCTCTGTGGGCGGTTTCTGACCTCCATGCAGCGGTGAAAGCTAACGCTGAT  
CCAATTGAGAATATTCAGCCTAAGGATCCGTCTGACTGGTTGATTGTTGCAGGTGACGTG  
GCGGAACGTACCGAATTGGTGCTGGAAATTTTGGCACGTTTGCAGGCGCTTTGCCAAG  
GTGATCTGGGTTCCGGGTAACCATGAGTTGTTTTCTCGCTCCGCGGACCGCTATCAGGGG  
CGCGATAAGTACTCTGAACCTCGTTGAAGGCTGCCGAAGATTGATGTGTTGACTCCGGAG  
GACCCCTTACTTAACCTTTGGTGGGGTTACTATCGTTCCGTTGTTTACACTCTATGACTAC  
TCGTTCCGTCGACCTGGTTTCACCGTGGAGCAGGCTGTGCAAGCGGCGCGGGATCGTCAA  
GTGATGATGACTGATGAGTTTCTATTGCGCCTTTTGTGATATCCGAGCGTGGTGCTGG  
GATCGCTTAGCCTATTCCATTAAGCGTTTGAGCAAGATCAACGGGCCAACAATTTTGATT  
AACCCTGGCCGCTGGTGGTGGAACCGACTTATCAGATGCGCTGGCAGGAACCTGCATTG  
TGGTGCGGTACTCGCCACACCAGGGGATGGGCCGAACGCTACAACGCGGAAGCCGTATT  
TACGGTCATCTGCATATGCCCAGGAATAACCAACGTCAACGGTGTGAAACACATTGAAGTG  
TCGTTGGGTTATCCGCGCAATGGGAGCATTGGTCTGGGCAGCATGTGTGGCCATATCCA  
GTGATGGAGGTGGACAATGCTGGA

>RXN01492-downstream

TGAGTCTTTGTTTCCAAATTCGG

>RXN01518-upstream

AGCAGAACCTGATGCCGTCTGCACGGCACGACCATTGCAGAACATGTGGATAATCTTGA  
TCCCACAGACATTGAAGGTGTCACCAAGATTTAAGGAGTC

>RXN01518

GTGGCTTTCATGCAGAAAACGTCAGCGGGTTGGTTGATCGCAACGGGAGGTTTCCTCGCC  
GCTGTGTCCGCCATTTTGACGTGGCGTTTTTATGGATCCATGACCTCTATTTCCATCACG  
GTATCCATCACTTTTGGTTGTTGGCCGTGGTGTGTGGTTTCGCAGGTGTGAAGGTCCAA  
GGTCGCCTCGATGAGGGGCTGATCGGCCAGGACAAAATCCCAAATGAACCCCGTGACCATT  
GCCTATCTGGCCATGCTGGGTGCGAGCGTGTGCGTGGGGTGGCGCAATTTTCGGCGGCGTT  
TATGTGGGAATTGGCAGTTATGTAATCCCACGCGCGGTGAGTTGTCCGCAGCATCGAAT  
GATCTTCCGGAGTTATTGCCCTGTGCGCTGGGCGGAATCGCACTCTCAGCTGCCGGAATT  
TATTTAGAGCGAAGCTGTGAGGCTCCGCCTCCCCAATCTGGCGAAGCGATCAGC

>RXN01518-downstream

TAGATTGGAATTCATGAATCAAG

>RXN01539-upstream

GAACAGCACGGTTGGGTGCCGAGAAATTGTTGCGTCGTTTGAACGCACAGGTGCAGCAG  
CTCAGAAATAATCAGTTTGACGATATGGACTTTTAAGGAGT

>RXN01539

GTGGTGACAGTGCGTGGGAATGAGAAGAATAAGATACGAGAAGAGCGGGTGGCTCGGCGT  
GCCCAGGCAGTCGTAGAGGCGGAGATTAGTCTTGCTGCACAAGCAAGTGAGCAGGTGCGT  
GAACAAGCAGAGGCGCCTGATGTAAATGAACAGGTAGAAGAGGTAGTGTGAGGTATCT  
TCTGTCCAGTCATTAACCCAGCCTAAGACGTTGGGGCAGCTGCATGACCCAAGGAAAAAT  
GTCATGAGTAGCAGCGACTTGGCTTCTATTATTGGTGTAGAGCAACAGCCTGTTGCTTAT  
GGTGAGTCTGAGGAACCAGAAACACTGCGTGATGTGTTGCCTCGGCGAAAGCTTCACCCA  
TCTGAGATAACACCGAGTTATGAGGTTGCTGATGGTGAACAGCGCAGCATTTTGGTGAA  
TCAGTCCGCTCTGATTTTGATGACCTCAGTGATGTGCAAGAATTTGATACCAGTCATTGG  
GTGCGTGCTGGACAAGATGATCGTAGTGATGATGATCGACTCGCTGATGAGGCTGGTGTA  
CCGCGTAGTGGCGCACAAAGATGTAGCTGATAATGAGGCTAATCTTTCTGGTGTGGATGAG  
CAGCTGCACATGCGTGAAGTCCATGCACAGAGTTTTGACCCTATTGACGTTGCCAAAAAG  
GAACGCAAAGCAGCGGAAAAGAAGTATGCCAAGCCACCAAAAGTGATAATCCGTACCTA  
GCACGGGATGCCAAAGATGCAGCTGCTCGTAAGCGGAAGATCAATGCAGCTCATGATAAT  
TTTGCCCAAGAGATGGCAGGCTGCGATGGGACCCTGCGCAAAGGGGTCAACACTCAA  
ACGGTGATGGCCGCGTGTACGACTGCTGCGGTGATGTGGTGCATGAGCCCACGTATGACC  
GGTGTGAACGTGGATATGAAGCGCAAGTTTAAACAAGGATCTGGAACAGGCTAAAGACACT  
AAGTTGTGCAAGTATGTGTCCAAAGATTTTTGGAAGTCAAAGCTGACGCGCGATAAGACG  
GAGAAGGAAGCGAAGTCGCTCTCTGATGCGTTTCATGCAGCAGAAAACAGCGATCATCAGC



AACCGTGAACGAATCCCCATGAGTGTGCTTCTGCCGCGCAGACCGTGGTTCGGTTGTCT  
 GATCAAGCGTATGAGGCGATGCGTGAAGTAGATACGGATGGTCAAGCGATAGTGGATGCG  
 AAGGATGTCTCTGCACAGGTGGCAGAAGATATTGACATGGTGGTCAAGCAGGGTGAAGAG  
 CATGGCCTGAAGTCAAGGATATTTATGGCGCTGCCCGCGATATTGTGGGTCGTGCGCATG  
 GAGCGCGATCCAGGCTATGCTGCCCGGTTTAAATGAGACGGCTTTTGGCACCGTGCGCCTG  
 GGTGAACAACGACGTGGCATGGTGATTTCAAAGACCCCGACATGGCAATTCCTTGATGGT  
 GCAGGTTTGAGTAAAAACCCCGCTGGTTTAGTGTTCTGTGAGCCGATGGGTAATGCGCAG  
 AACTTCGCTGACAACTGGCTGCGACTTTGGCGACAGAAATGCGGGTAGCTGGTGAGCAG  
 TACGGTTCCGATGGCGTTCTGTATGTAGTTGCCGGCTTCATGACAGCGACTGATGTCTCA  
 GAAAGTGGCCTCGCCTCTGCGAAGAACTGTTACCTGACTTTGATACACGTGGTTCGCAGT  
 GCTTCTCGGGTTCGCCAGATTGCTATGGCACAGCGCACACAGGCAGCGATCAAGGTGTTG  
 CAGGATGATGGTAATCAGACCGCGATGACGACTGAGCAGGTCAAGGAGGTTTCAAGGTATGG  
 GCGATGGATCAGGCTGAGAAGGTGATGCAGCGTGATCATCCAGCGATTCTGGATAAGTTT  
 GTGCGCAAACATGGGCAGACATTTGGGCAGGATGCGGACCGCTTTTGTAAATCCATAACT  
 ATGGAAGAACACGAGCAGCGAGTACACTGATGCTATGGTTCGACCTCAAGAAAATCGT  
 GGATCAGGTCGAGAACTGGCAGCTCGTCGTGTACAAGCAGCGCAAATCAATCAGGCA  
 GCACAGCTGGATATGAATGTTTCATGATTTCCGTGAATCGAATCTGCCAGAGGAACGACCC  
 GCGAATCCTTATGAAGCGTATGTTCTGTGAGACTGAAGCGAAAACCAATGATCCGCAGTAC  
 GGTAT

>RXN01539-downstream  
 TAATAGAAAATGATAGAAAGAAG

>RXN01549-upstream  
 TGAATTCCGTTTCTAGATTTTTTTTTATTGATTGTGAGAGTGCATT

>RXN01549  
 GTGGCTAATGATTTTATAGAACCAAATGATGCCCCGATGCACCTGATAATGGTGAAGTTCG  
 GGAAGCTCGGGGTTTGTGATGAAGCAAAAGATAAGACCCGCTCAGCTGCACAAGGCTTA  
 GGTATGGCGCACTACGTGTAGGTTTTGGTACTGCAGCACTTGCAGCCAATGGTGTCTCGC  
 TCTATGGGTAAATTTGGCTAAAAACCTGTGGACACGAATGATGGGGCTTGCCCTGTCTGCC  
 GGTACTGGTATCTCTGCTGCCACAGGTGGCATGATCACTGCACGTGTAGGCGCAATGCTG  
 GCAGGTACAGGCTCGGTGTTGTCTGCTGCGTGACGACTATTGCGTTGATTGTGTGATGATT  
 GTGGTGCCTGGCAGGTTCGAAAAGACGGCATTATCGAGTTGTGTGAGCCGCCAGTAACGGCC  
 AACCCGTTTACCATTGACGCAGGTGATATGACTGAGAACGCGAAGTTGGTGTACGGTGCG  
 CTGTGCTATCTTGGGATGAATGATCAAAATATCGCCGGTGTCTTGGGCAACTTTGAGACA  
 GAATCAGGTATCGACCCGACTGCGGTGGAGGGTATTTTGTATGAACCAAATACCATCGGT  
 CCTCGGAAGAGAGCTGCGTGGGATAAGAACTTTGAACCTCAGCCGATGGGTATTGGGCTT  
 GGGCAGTGGACAGCAGGGCGCACACAGATGTTGCTAGATTTTGGCCCGGATAGAAACCGA  
 GACTGGCATTACATCGACGTGCAGCTGCACTTTGCTATTAGTGGCGATAATGAAAGCGAT  
 CGCAAGGTTTTTCTGGAAATGGTTGATAATAAAAACTCCAGTAGCAATAGCCCCACCGCA  
 GCGTCCGAGTACTTCTGCGTGAGTGGGAGCGCCCGGCAGATGTGCGAGGTAATGCACCC  
 ATTCGTGCAGAGCAAGCATCTAAGTGGTACGCGCAGATGGGTGGTTGGCAAAAGAACTCA  
 ACCTTGGGTGAGTCTGTGATCGCTATGGCTGATGGTGCAGCAGCAAAATCCACGGCGCGT  
 GATGAGCAGGATGCTCTTAATGATTGTCCTGAAGAGGACCGCACCTCAGGTGGAAATACG  
 TCCGCTGCAGAAGCAATGGTGACTATTTACATCCTTATCTGGCTGATTCTCGTGGAAT  
 GACGGTACTGATATTTACCGCTATATCCATGATGAAGTGCTCACCAGGTGATCCGTATTAC  
 GCATCCTGTGACCGTGGCGTTGCTACCGCTATTCGCTGGTTCGGGCACGGATGATACGTTT  
 CCAGCAGGTCCAACAGCAGCACAGTATGAATACGTTGTGGGCACAGGATCGGGCCGTTGG  
 GAGGAAATCGGCAATCTTGCCACCATGTGAGAGAACGATTTGTTACCTGGCGATGTGCTT  
 CTTGGTGCACCGAATCACGTTGCGATGTATGTCAGCAATGAGGTGTTGTGAGCATGTTG  
 GGCCCTGGTAATGCAGAGCCTAATGCAGCTATTGGTCATGCATCGTTGAATGACCGCTCA  
 CCTGGTCTGGATACCTTGAGTCTGGATGGATGGGGCGTGAACCTCAAGGTGTTCCGCAAC  
 ACCCAGGCTGAGACAACTCAGTGTCTCTGGTGTACAGATTCCGGCTGGTAAAGAAAT  
 GGCGAAATGACTAACCCAACTCGAACTACTCCTGCAGGA

>RXN01549-downstream  
 TAAGTTTTTTTCATCGCTGGGTT

RXN01557-upstream

TAAAGGTGTGAAAAATAGTTCCTCACGTGGGGAACATACTGATCCTTGATGCGTTAACTT  
GATTGACGACGAAAAATCAATTGAAAGGATCGGGGACTCC

>RXN01557

GTGCGAAGCAGCAATCCCGTTTTTAGTTCCTTAAGGAAACTCAACGTCCACAAGGCCAG  
AACCCTACGGTGGTTACGACAACTTCGGTGGTGTCTACCAGCAAAACGTAGCTCCACAG  
AAGGCGGAGCGCCCAATGACTGTGGATGATGTGATCACCAAGACTGGTATCACTCTCGCG  
GTTATTATCGTTTTTGCATTGGTCACCTTTGGCGTGTGGTTGGTTAGCCCCGGCCTCGGA  
ATGATCTTGACCTTGTGGTGCCATCGGTGGTTTCATCACCGTTCTGGTCAGCACCTTC  
GGCAAGAAGTACGGATCTGCGGCAGTCACCTTGATTTACGCAGTATTCGAAGGCCCTCTTC  
GTCGGCGGAATTTCCCTTCTGCTGTCCGGCTTCACAGTTGGTAACGCCAACGCAGGTGGC  
CTCATTGGCCAGGCAGTCTTGGCACCATCGGTGTATTTCATTGGCATGCTGTTGTATAC  
AAGACTGGCGCTATCAAGGTCACTCCTAAGTTCAACCGCATCCTCACCGGCATGATGGTT  
GGCGTCTTGGTTCTTGCTCTGGGCAACGTTGTATGGGCACTGTTCACTGGTGGCGCAAGC  
CCACTGCGTGACGGTGGAAATCATCGCGATTATCTTCTCCCTCTTCTGCATCGGCCTGGCA  
GCTTCAGCTTCTCTCCGACTTCGATGCGAGCTGACCGCCTCGTCCGCGAAGGTGCACCT  
TCCAAGATGGCATGGGGCGTTGCGCTTGGTCTTGACAGTGACCTTGGTCTGGCTCTACACC  
GAAATCCTACGTCTGCTTAGCTACTTCCAAAACCGC

>RXN01557-downstream

TAGTTTACGCAGCACAAAGACCCC

>RXN01574-upstream

AAAAATCCGCACACCCCACATTGCTCAAAGGAATTGACAAGGCGCTTCGCAAGGCCGAGT  
AAGGTGGGCAACGAGTCGGTGAGAGTATGAGGAATATTTG

>RXN01574

ATGAGCAACAAACGCATCGGTGTAGTGATCGTTTTCTACGGACACGAACAAGATGTTGCC  
AACCTGGTAGACACATTTGCAGATCAGCTGAAAACCTGGTGACCGCGTAGTTGTCGTGGAC  
AACCGCAAACTTGGGTGTTAAAGACGCCGTGGGGGAGCGCCTGGAAAAACACGGCGCA  
GAGATCATCAACCACGACAACGGTGGTTTCGCCGCTGGCTGCAACGTGGGCGCAGCGCAC  
ATCGTGGATGACGTTGACCTGCTGTTCTTCTCAACCCCGACACAGTGATCGACGATCCC  
ACCCTGTTCAATTTCGCTGAGACGCGTCGATGAACAGTGGGCGAGCATTCATGCCGTACCTG  
CTGCTTCTTGACAGCACCATTAACTCCGCAGGCAACGCCCTGCATATTTCCGGACTGTCTG  
TGGGTGACTGGTCTGGATGAAAAACAGTTGAAGGCTCATCTGAAGTTACCGATATTTCC  
ATTGCCTCTGGCGCCTGCCTTGCCGTGCGCGTGGACTGGTGGAAACGCCTCGGTGGCATG  
GAAGAACTGTATTTTCATGTACCACGAAGACACTGACTTCTCCGCCCGCTTGCTGCTGGCC  
GGCGGTGCAATTGGTCTCCTGCATTCCGCGTATGTACCCACCATTACGACTACGCCAAG  
GGTGACTACAAGTGGATTTACATCGAAGCAACCGACACGTTTTGTGCTCAGCGTGCTG  
CCGCTTCCATTGCTGTTCTGCTGATCCCGCAGATCCTCGGTGTGAACCTGGGACTGTGG  
GCGATTGCCCGCAAGGAAAGAGGGTCCGACTCAAGGTGAAGTCCCTTCGCCTCCTGATC  
CGCGATCTACCAGCGATTTTCAAACCTGCGTAGGAGCACCGAGGAGCTTGCCGAACCTACA  
CCATCGCAATATCTGGCAAAAATGGAATGGCGCCTAGACAATCCCAACCTAGGCAACATT  
GGATCCAACAAGATTGTTGCGACTGGATATAAGACCTATTACAAGTTGTGTATGAGTATC  
CTGAAATTGCTCGCT

>RXN01574-downstream

TAACACCCCATAAAGAGGGTGAA

RXN01589-upstream

AGGGATGTAGATGCGCCCTCATATTGGTACAAAAATATAAATTATCAGCATGATTTGGAC  
GCTTTAATTCAAAAATTGTAAGCTGTTAGGAGGTCCACAA

>RXN01589

ATGGTAGAACAAATAAAAGATAAACTAGGACGTCCCATCCGTGACTTACGGTTATCTGTG  
ACAGATCGGTGTAACCTTTAGGTGTGATTATTGCATGCCATAAGAGGTATTTGGAGATGAT  
TTCGTATTTTTTACCTAAAAATGAACTGTTAACGTTTGATGAAATGGCTAGAATCGCTAAG  
GTATATGCAGAATTAGGTGTAAAAAAATACGCATTACAGGTGGAGAACCATTGATGCCGA  
CGCGATTTAGATGTACTTATAGCTAAATTAAATCAAATCGATGGTATTGAAATATTTGGT

TTGACTACAAATGGTTTGTATTAAAAAGCATGGACAAAAGTTATATGATGCTGGGCTA  
 CGCAGAATTAATGTCAGTTTGGATGCTATTGATGATACGCTATTTCAATCAATCAATAAT  
 CGTAATATTAAAGCGACTACGATTTTAGAACAAATTGATTACGCGACGTCTATTGGTTTG  
 AATGTAAAAGTAAATGTTGTTATACAAAAAGGTATTAACGATGATCAAATCATACCAATG  
 CTTGAATATTTTAAAGATAAACATATAGAGATTTCGATTTATAGAATTTATGGATGTTGGT  
 AATGATAATGGATGGGATTTTCAGTAAAGTTGTAACATAAGATGAAATGCTTACAATGATA  
 GAGCAGCACTTTGAAATCGATCCTGTAGAACCAAAATATTTTGGGGAAGTAGCAAAATAT  
 TATCGCCATAAGGATAATGGTGTTCATTTGGTTTGATTACAAGTGTTCACAATCATTTT  
 TGTTCTACATGTACACGCGCAAGGCTGTCTCAGATGGGAAGTTTACGGATGTTTATTT  
 GCAACTGTGATGGATTTAACGTTAAAGCGTTTATTCGTTCTGGCGTGACCGACGAAGAA  
 TTAAGAACAATTTAAAGCTTTATGGCAAATAAGAGATGATCGATATTCAGATGAGAGA  
 ACTGCTCAAACAGTTGCCAATCGTCAACGTAAAAAGATAAACATGAATTATATTGGTGGT

>RXN01589-downstream  
 TAATGTGTAGGGACCACTACATA

>RXN01590  
 TGGGGTCAAAAAGATCACTGGGGCAAAGCTCCACTGGGTGATCACGATGCTGTGCGTATC  
 TATAGGCAAGCAGAAGCCTTGATGAAACAGCGCGCAGCAAAACAATAAGGGCTTAGACCTC  
 AATGATGAAGCGACCTATGGCGCCATCATGTTTTCGCTCTTTCGATGATGCCTTCGCCGCT  
 GATGCCGAAGCTCATGGCTGTGTACACCGACCACAGTTCGCGAAGGTAAC TAGGCGAAAT  
 ATTCTTAATTCACCGCAATACACGGCGATTAAGTCATCTTATGACGCGCTGGTGCAGCAG  
 GATCTCGTGGCCCAACAGCAGCAGGCACAAGCGCTACAGCAAGCTGCTTATGAGCAAGAG  
 CAGGACGATTTTCCAGGCACGTGATCAAGCAACATTCAGGCTGAACAAACGCTCGCG  
 CAAGAGTCCGTTTCGCCAATCAGAGGGTGTGGGTTTACCTGTCATTGATCCGATGGAGAGC  
 TATTTCCGGGAGTACGCCCTTCATGAAGGTGTGAGATGTTTGGTACCTGGGGTACGCAC  
 GTTGATGCTGGTGTGTCGAGTTTAGCACCTCTGATGGCCGTGCGATCCGAGCGCTTGTT  
 GATGAGCATCTCGCAACCTATGAACAGTAGAGCAGCGGGGAGTACTCAGGCATTCTTC  
 GCCTCTGTCAATGCTGCCCTTTGCTGAGGTGGCACCTCACGCAGCACCCATGTTTAGTGCG  
 ATTGCTCGCGAGGGTGAGGGTTCAAAGGGGTACCAGGCGCTGCGTCACCGTTTCGACAAG  
 ATGGTCCGCACTGCAATTGGACCTAATGGTTTGCCTGAGGGACCTGATCTGGGTGGTCTG  
 CGTTTACCTATTTCCGCTTATGATCCACGCTGGTCAGACCGCGAAGTAGTCCGTGTGCAC  
 GGTACCAAGTGTCTACGTGTCGGAAGAGAGTGTGGCATGATCAGGGACCTTGATCTA  
 GCAACGATCCACCTACAAGATAATGATGTTTACGAGGGCACTCATCGAGAAGACGACACT  
 AAAGGCGGTGTGCGACCGTTGACTCAATGGGTCAATGGTGAAGCTATTGCCTGGCGCACT  
 ATCACCGAGAATGACCAGATGCGACTGCCCAATATTGGTCAGTTTATGACGGCTAAAGAA  
 TACCGTGCCGAGCGTCATGGCTGCGTGCTGGACTCATTGATACCGCAGATGTTGCGAGT  
 CAGAAAAATTGACCCCAACAAGGTTCATGTCTGATGAGGGTATCGCGCGCTCGGAAGCTATT  
 TTGACGTATCTGTGCGATGAGGGTGTGGATTTTAGGATCGAGCCAGATCGTGAGCCGGGA  
 CAGCTTAAAGTGCGTATTGAGGGCACCCGTATTGATATTTCGCTCACTGATACTCGCGCC  
 AATGAACAGATGGGTGGGTGCTGTCTATGATCTGGCACTGTGATTAAGTATTCCGCCGAA  
 CAAACAGCGGAAGAACGCTACGAGCTCGTGAGCGCATGGAGAACGGTGATGGAACGTGG  
 ACACCGGCTACTGATTATGAACCAAGCCCAACTGAAGTTGTGATCTCGTGAAATTTGCT  
 CTCGGTCGAGAGGTTGAGCGACAGGATGGCAAAGGTCTTGTGGTGTGCCTAATGCTCGA  
 CACCCACGTGCTTTAGAGCAGGCACAGGATGCATATTTCACTAAGAATCGTTCCGCATTC  
 ATGGTGCGTGAAAGGGCTCTCGATCGTTTCAGGATGCACGTGATCGAAGTGCTGGTCTGGA  
 AAGTGGTTTGATAATGAAGCGAAAGCATCGGAGTGGCTTGGTAACAATATCGCCCTTACT  
 CGTGCGCGTGTGGCCGAAGAGCTCGGCGTTGAAGAACTGATTGCGCTTTCTGCACAGTAC  
 GCCGATGATCCTGACTTCTGCGCGCTTTTGTGGTGAGGATGAGCTCATGGCGATAAAG  
 CAGGACTATTGGGCGATGCTGCGAGGTGAGGAAACCGATCTGCTTAACCTGGGGTTAAC  
 CGCGATGATTATATGGCTGCTATCCGCGATGGTGATCATGAGCAGATTGCTGCGATGACC  
 TCAGCAATGAATGCTGTGACCGTGAGGATCGTGTGCGTCAGCACGCGGCCCTTGTTCTT  
 GATGATTATGTGCGGCACGGTGGAGCCTGATCCTGTTACCGGCTTGCGTTTAAATCCGGTG  
 ACAGTTGCTCAGCACATGCCGAGTGCTAAATCCCTGTGGTCAAACCATGACGATATTATT  
 GCCGCTTGCGAGCGACTTCGATTACTGGCGATGAAC TGCGCGGTGACGAATTCATATAAC  
 GATGTTATTAATCAACAGTTGCTCAAATTTAATCCTGAGACCGCGCAGAAAATGGTTAAT  
 AACCCGTGATCTTGACCCGAGTTGGCTCGATTTGGCAC TGTCATTGCCGAGACTATTTCC  
 CGCAATGGTGCTGATGTGGTCGATATTGCTGTTGACGATAACGGTGTGGTGCGGTGGACC  
 GCACAGCGACGTGTGGTGCGAAGGATAGTCGTGCAAGTAGATAGTAAGGGGCAAGTTCCG  
 GGTGAACGCACCCGTCATGTGCAGGGTGAGATAGGTGAGATTTTTACTCGCGGTGAGCAT  
 GGTGAAATTGTACCAAATTTAATGGTGGCGAGAACTATATGTTTGCCCTGGCTACACC

GCGTCTGTGGTACCACAAAAGCCTGGTGAGACAAAGAGTTTAGAAGAGCGTACCAAGCTC  
 AAAGGCTATGAGCAGGTGATGTCAGAGGCGTTGGTGTACCGTGTGCGAGAAGATTTGATG  
 TTCCTGAGCGATCCCGAGTGGGTGCTACAACCAGCATCAACAGTGCATATAAGCGACTG  
 TATGACAATCGCTTCCCTGTGGACTTCTTCGAGCGCAGCGCCGAAGAAGGTTTGAGCGAT  
 GAGTGGCGTGCTGCGTTGCTTGAGACTGCGAGTTTTCGCTGTGCGCTACGACAACTCTATT  
 CGTGATGGTGCGAATGTGATGGAGGATATTCGAGCACAGCAGCGTGGTTTTGATGCGCGT  
 AATGATAACTCCCGTGATGCGCTGGTGTACCGGTGGGCGTAACATTTCTGTACTTGAT  
 GTTGATGCGGGTAAAGGTTTCTTTGATCCCATGATGACTGGTATGGCGGCGAACCAGGGT  
 TCTGTTTCGCTATTTGTGCTTCTGCGAAGGTGGGCGCTGATGGCATGATTACCCCTGGT  
 GATCCGGCTGATCGAGTACCTGTTGCGAGCGCATCCAGAATCATGGGCGATGGGCTTTGAC  
 CCACATGACCGTCAGAACATGACTTTCTCGAACATCATGCAGGCTAGCGCTGTGACTGGT  
 GGTGCACGCACTGCGATGATACAGCTGGGCGGTGGAACTTTGAAGATGGCATTATTGTC  
 TCTGCCGATTTTGCGAATACCCATGTTATTTCGCGATACGGAAGATGAGATGCGCCCTTG  
 GTTGCCGGCGATAAGCTGTCTGATTTTTCACGGTAATAAGGGTGTGACCGCTCTTGTGTT  
 GATCCAGCGATGAGTGATGCTGATGCACGTGCAGCAGGGCTGGAATCAGAGGTGGCGTTT  
 TTCCGAGACAACCTGATCTAGAGGTTGTATGAGTCCGTTTCTGCCATTTCTCGTTTTT  
 AATGGTGGCAGCGCAGTGCATGACCAACCCGCGAGGATGTGGTGTTCAGGAATAAT  
 GATGGTTCTACTCGTGTTCGAACAGGTGCCCTCTGGTGATCTCAACTTCATCGTCACGCAT  
 ATGGCTGTTGATGCGAAAACCAATGTCTATGATGAAGAAGCTGTTTCGTGAGGGCCAAGGA  
 CGTAAAGCGTCTTCTCAGCTGGCGTGGGTGCTCCAAGCCAGGAATGTCATGAGATTATG  
 GAGCACTTTTATGGCAACAACGTCTCTGCATTGGCTAACTTCCAGGAATATCTTCGCGTC  
 ACGGGGCTTGATGTCAACCCGATGGTGAGTTGCGCGAGGGGTTACGCGAGTCCAATGAG  
 CAGCGCAATATCATCGAGATGCCAAGCATTTACGATGAGAACGGTGAGCTGAATAATCGT  
 GTTAATCGTGACAGGTGCGCGAAGCTTTTGTGAGCAGATCAGTCGCGCTGGTGGTGT  
 ATGGAGATTCTTTCCAGTTACAGTTGCGCAATGGTGCACAGCTAGAAGAGTCACCTAAT  
 AATCCAGACATGTATCAGTTGCCACTACTGAGCCCGCATTTGCGCAGTGATGAGGATTTA  
 GCGGACGGTAGTACCTCTCGACATGAGTACACCACGCGGTATATGGCTATTTTTTGATACG  
 TGCTACAAGCTGGCAGAAGAGCAAGCCAAGATTGACGCATTGCGCCAGGAGGAAGCGCAG  
 CACGGCACGTGCTCGTGTGCGGAAAAGCGACTGAGCGAGTCACAGAAGTTTGTGAT  
 CAAGCACAGAAAAAGGTGCGAGGCAAGCTTTGATGGAATTGCTAATGATATTGTCGCCAGC  
 CGGATCGAGACCAAGAACAATGTGTTCAAGGACGGCTTTATGTCGGCGCGACAGTCACAC  
 TCCGCTACTGCTGTGTGGACAGGTGATCCACGCTGTCAGTTGATGAAGTAGCCATGAAC  
 TCTTCGATGGCAGTGAACTCGGCGTTCTCGATAACGGTTATGCAATGGTGTGGCGTGAT  
 CCGGTGATCCGCGATGGTGGTGTGCGCTATTGCGTGTGGTTATTAATGATGATCTGCAC  
 GGTGTGGCAGTCAACCCGTGTGTCGGTGAAGAGCTTTGACGGTGACTTCGATGGTGACTCT  
 GTAGGTCTGGTCCGCAATCTGCCGAAAAGGCGCATGAGGAGGCATTGTCCAGGCTCACA  
 GTTGAGGCAACATGCTTGATCTTGGTGATGGTAAGCGTATGGAGGACGGCACTATGTTT  
 TATGGGCTAACTCTGCATGACAGCCTCGATGTACAGGTAGCGCAGCACCATGATCCGGCA  
 ATGGCCGAGAACATGAAGGTTATTGTCTCTGAGCTTAACCGCTACCAGCGTGAATACGAG  
 GCCGGCGAGATTAGCCGCGAAGAATTGCTAGAGGTCAACCGTGACACATGGATGATCTC  
 AATGAGCACTATGCACAGGCTTTTGCCAACCGCGATGGTTGGTGACCTTGCCTTTTGAC  
 GGTATGGAAAACCATGCTTCTGTTGCGCAGTGCTTCGAGACGGGTGCGAAAGGTTTCG  
 CCTGGCAAGCTGAAGGAATATGCCACCTATCGGCGCTGATCCGGCGCAGGGTTTTTAAA  
 GACGTAGGTCAACCAACGCCAGAAGCGCTGCGTAGCCACTATGAGGGTTTCGAGAAGGCG  
 ACTGCAATTAAGGTGCTCTTTACCGGTGTGGCTGGTAAAAAAGAGCAGGAAATGGTGGCA  
 TTGTGCCGCAATCTTGGTCTGACCAAGGAAGCTATGGCTGCATCAGCACCGGCACAGCAG  
 TCGATTCTGCAGGCGAAGCACGACCCGATTGACGCGCTCTATCGTGCAGAACTCTTATG  
 GGACCAGTAGGTGATCTCTACCAAGGTGCGAAGATGCGTCTGTGGTGAGAATGAGCAAGGT  
 CGCTATGAGTGGGAAGTCGTTAGGGACGAGAACCACCAGCCTATCCAGGCCACCAAGGAT  
 GAATGGGTACAGCAGTACATGGAGATGTACGCCGATGACAAGGGTATGGGTGTCTCGGT  
 GCGTTGACCAAGGTGGAGAAGATCGCGGAAGAAATTTCTGATGAGCAGGGTTATATGCGT  
 GTGCTTAGCCATGATGAGTACCCACTGAGATTAAGCCACTAGCACTTGATCAGCTTGCC  
 TATGGCGATAAGAAGAACCGCTTTGATTTGTTGTGCGAGATGGCAAAGCAGCAGGTCAAC  
 ATCTACGACGGTGATGCTTATGACTTTGCCCTCGTGTGGTGGCGCCAATATGAAGGCA  
 ATGGAGGATGCAGCGGTTTTGGTATCCCTGATGTGGAGATTAGTTCGATTCTGCACAG  
 CAGTCATTGGCGAGCTTTGAGCGAGTCCCAACGTTCTGGTTTTCCGTATTGAGCGTCGT  
 GTGCCGGCAGAAGTAGGTACAGGGATTGCTGCAACAGCACCGTTACCTGATGCAGGTGTA  
 CAGGGGAATTATGTTACAGCAGCAGGTGCCGTGCGACCCCGCCAGTTATGCCTGTACACCT  
 CCGGCACAGCAACCTGTTTCGCCTGCTCAGACGGACTTCCGGGGCGTTGGTCAGCCACTC  
 GACCAGGGCGGAAAAATCGGGAATTATGGACATCAGGGACCTGCAATGGGGGCGCAACAG  
 CCAGTTGTGCCCTCAGCAGCAGAATATCCGCTGTGCATAATCCGGTACCACAGAATTCT

GTTCCGCCTACTCCGGTTGTGCCGAAGCCAGGTACAGGAAACCCGTTTACTCATGGTGGT  
GCGAACAATCAGTTTATGGGTCGATTTGATACAAGCCGTTACAACCAACAGGAACCACCA  
CAACGACAGGATGGCGGGTTTGAGCTC

>RXN01590-downstream  
TAAATAATGGCAGTAGATTTCAG

>RXN01592-upstream  
GATTCAATGGTAGAGGTATTTTCATTTCTCCCATTTGGATCACACTCTTTTTGTCTGTTCTA  
TAATAAAGTCTTTACCCGGTTCTCAACATCAAGGAACAAC

>RXN01592  
ATGGCTGATAACTTCGACCGCTCTCGTGACAACGATCGCTCAAGCGACCGCACTCCTCGT  
GGAGACCGCGGCGATCGCGGTGGCTACCGAAACTCCCGCGGCAACGATGACCGCGGAAAC  
TACCGTCAAAACCGAGATGGTGAATCACAGAGATCGCGGCGGATACCTCGGTGACCGTCGC  
GACAACCGCTCAGGTGAATATCGTCAACGTGACGATAGGCGTGACGATCGTAGGGACAAC  
CGAAGCGATGACCGCGCGGTGGTTACCGCTCCGATCGCAACTTTGACGATCGCAACAGC  
AACATGCGTGATGATCGTCGCGGCGGCGACCGTTCATACAGCCGTAATGATCGCTCCGAT  
CGTGGCTATCGTAGCAATGACCGCTACGACCGTAATGATCGTCGCGATGACAACAGGGAC  
ACCAGGGGTGGCGATCGCGGAGACCGTCGCTACGACAGGCGCGATGACCGACGTGATGAT  
CGTCGCGATGATCGTCGTGGCGGACAGGGCCAGGGGCGTCCAGGTGGAGATCGTCGACAT  
GCGAACCGTGCGAGGTGCGAGTGCAGATCAGCAGCGTGATTCGCTGCATCCACAGCGCGCT  
GGTTTCCGTGAAGAGCGCTTGAACACTCGTCTCAATGAGCCTGATTTGCCGGGCGATATT  
GATATCAAGGACTTGGATCCTTTGGTCCTGCAGGATTTGAAGGTTTTGTCTAAGGACAAC  
GCAGATGCCGTGCGAAAGCATATGATCATGGCTGCGACCTGGCTGGCCGACGATCCTCAA  
TTGGCACTGCGCCACGCCCCGTGCTGCGAAGGATCGCGCGGGACGCGTGTCCGTCTGCGT  
GAGACGAACGGCATTGCTGCTTACCATGCTGGTGAGTGAAGGAAGCTCTTTCGGAGCTT  
CGTGCTGCGCGCCGATGTCGGGTGGTCTGGTTGATTGCTGTGATGGCTGACTGTGAG  
CGTGGCTTGGGTCTGCTGAGAAAGGCGATTGAGCTGGCTCGAGAAGAGGATTTGAGCTCT  
TTGGATCAGGATAACCTGATCGAGTTAGCGATTGTTGTTGCTGGAGCACGCCATGATTTG  
GGTCAGCATGACTCTGCGATTGTGGAATTGCAGAAGGTTAATCCAAGCTTGAAGAGCACC  
GGTTTCACCCATTCTCGTTTGTCTTACGCTTACGCCGATGCGCTTGTTTTGGCTGGTCTGT  
GGCGATGAAGCACGTGAGTGGTTCCAGCACGCTGCCACCTTGGATGAGGACGGCTACCTC  
GATGCAGAGGAGCGTATCGAGCAGCTCGATAATGGGAACAAC

>RXN01592-downstream  
TAGACTATTGGTCTAGAGTGTA

>RXN01597-upstream  
GAGTAGAACCACTTCTCGCCGCCAGTGCATAAGAGTTTTCTTGGAATTTTTTAGGCGCGC  
CTCCACCAAAGGTTGAGACTTTGGTTCCACAATGGGCTGC

>RXN01597  
ATGAGTCTGTTCAACCGCAAAGCCGACCTGCCCGGCTGCAAGGTGCCACCCGAATCTGC  
ACCCCGCAGGGCAAAGGGCTAAAGCGCCTGTCCGAAGGCGATCTCGCAATCATTGATGCA  
CCAGATCTATCCAGGACCTTCGCCCAACGATTGCTAGCAGCAAAACCCGCCGAGTCCCTC  
AACGTTTCCCGGTTCAACACCGGATCGGTGCCCAACTTTGGACCGCAAATGCTTATCGAC  
GGCGGCATCCAGCTCGTGGAAGGCTTTGGCCAGGAGCTGCTCGACGGCACCAAGACGGT  
AAGAAAGGTGCGCTGACAGAAGATGGACAGCTCTTCTACGGCGAACGACTGATCTCTAAC  
GGCAGTGTTCTCAGTGACCTGCGGCTGAAAATGCATTTGCAGACGCCCAGCAATCACTG  
CTGGACCGCATGGAAGCCTATTTCCGCAACACCATTTCAGTTCACTCAGAAGCACCG  
CTCCTGATCGATGGCCTCGGCATTTCCCGATACCGGAAATGCCATTGAAGGCCGCAAAGTT  
CTCATTGCCTCACCAGGGGATAACCACCGCAGCAGGCTCAAAGAATCCGCAGCTTCATC  
CGCGAATACGATCCAGTACTCATCGGTGTCGATGGGGCAGCAGACACCTTGGTGGAATTG  
GGGTACAAGCCCGCGCTGATCGTCGGCAATCCCACTGGTATCGGCGCAGATGCGCTGCGC  
AGTGGCGCCAACGTAATTTTGCCAGCTGATCCAGACGGCCACGCTGTTGGTCTGGAGCGC  
ATCCAGGATCTTGGCATCGGTGCGATGACCTTCCCATCCTCAGTAAATTCCTCCACGGAT  
CTGGCGTCTCTGCTGCGGATTTCCACAACCCGCGAGATGATCGTCAACGTCGGCGGTCTT  
GTCACCCTTGATGGTGTTTTTGAAAACCGAGAAGATTCCGATCCCGCGGCGCTTTTGACG

CGCGCCAAGCTAGGCACCAAGCTTGTGCGACGGATCCGTCATCGCAAGTCTTTACACAGTG  
CGCAGCTCCAGCAACCTTGGATGGATGTGGGCACTGTAGCCATTTGGTGGTTCTTGCA  
GTCGTGATTGTTATCGCTGGCACCAGGATCAGGCTCTTTTACCGACAACCTCATTGAC  
ACCTGGAACAGCTTCGCGTGACAGTGCAGGGTTGGTTCAAA

>RXN01597-downstream  
TAGGAAGGCAACATGGCTAAACG

>RXN01598-upstream  
CGCTGGCACCGCAGGATCAGGCTCTTTTACCGACAACCTCATTGACACCTGGAACAGCTT  
CGCGCTGACAGTGCAGGGTTGGTTCAAATAGGAAGGCAAC

>RXN01598  
ATGGCTAAACGACGTGGAAGAGGCGCCGCAACCTTCGCCGCACTGGGATTTGGTGCAGCA  
GCCGGCATTGCCCTTTGGAACTTATGTGCTTGACCCAAACCTTCCTGAAAACATTGAACCA  
AATGCACCAACATCAGCTGAATTAGTCGAGGCAGAGACCTTGGCTGAGGTTAATGCGGTG  
CAGGCCGATCAAGCAGACAGCATCATTGACCACATCGTGGAAGACGTGGTGGCTGGCACA  
CTGACCGATCGCCCCGTACTGGTGATGCGCACCGCTGACGCTGAAGAATCAGACGTTGCC  
GATGTGTCATGGCTGTTGCAGCAAGCAGGAGCTATTAATGCTGGATCCATTACACTTGAG  
GAGAATTTCTTCTCCCAAGACGGCGCGGACCAGCTGAAATCAATCGTGGCAAATACGTTG  
CCTGCAGGCGCTCAGCTTTCTGAAACCCAACCTGGATCCAGGAACTCACGCTGGCGAGGCA  
CTTGGTGCCGCTTTGCTGCTCAACCCTGAACTGGTGAACCACTAGCCAGCACTGCAGAG  
CGCGGACTATTGCTCAACGTGCTGCGCGACAACGGTTACATCTCGTACGAAGACGGCACC  
ATTTTGCCAGGCCAGGTCATCGTGATGATTACTGGCGATAGCGACGGCTCAGGTGATGGT  
GCCTTCGCTGCAGAAACACAATCGCTGTTTGTGCTCGCGCACTTGACGCCCAAGGATCAGGC  
GTGGTGGTTGCAGGACGTATTACACTGCTGCTGATACTGGAGTTATTGGACGGCTTCGT  
GCCAACCTTGATGCTGCAGAAAACGTCTCTACAATTGATTCCGTGAATCGTACTTGGGGC  
AAGATGGCTACCGTGCTATCAGTTCGTGAGGAACCTAGCCGGTAGGTCTGGAGCGTTTGGT  
TCCGCTGCCTCCGCAGACGCGGCAAGTCCGTCTCTCGATGGAACCTGCAGCAGCGCCAGCG  
CAG

>RXN01598-downstream  
TAGGTTTTCCAAGCCTTTAAAC

>RXN01618-upstream  
GGCCGTGCGCGCCTCCAGCGAGCCTGGCCGTGCCGAAAAAGTGCTCATTCGTTTCTAAAC  
GTTTAAGGCCCATTAGACCCCTGATTTAAAAGGATCTCAC

>RXN01618  
ATGATCATTATCGGAGCAGTTTTTCGCCATCCTCGCAGTTCTACTGCATGTTTTTCATCTTC  
TACATGGAATCATTCGCATGGACTAGTGAGAAAGCACGTGGAGTTTTTCGGCACCACCGAA  
ATCGACGCCGAAAACACCAAGGAGATGGCCTACAACCAAGGCTTCTACAACCTCTTCCTG  
GCAGTCATCGCCGGCGTGGGTGTTGCGTTCCCTCTTCGCTGGTTCAACTGGCATCGGCGCA  
GCCCTCGCACTCGCTGGCACCAGGTTCCATGCTGGCAGCCGCTGCAGTGTTGGCTTTGAGC  
TCACCCGACAAGCGTGGTGCAGCCTTCAAGCAAGGCACGTTCCCGCTGCTCGCAGTGGT  
TTCTTGTGATTGGATTGCTGGTT

>RXN01618-downstream  
TAAGCAGTTTTTTAAAGGAACCTT

>RXN01634-upstream  
ATTGGATCTAGGAAAAATTATGAACATCTCAAAGCTCGGACTGAGGATCGCGGTACACAGC  
AACGGCGACCACAACGGCGCTTGCCCTCGGTGGCAGGCAC

>RXN01634  
ATGGCAGTTGGTCAAGAACTGATCTGCTCAACGCTATGGAAACACTCGCTGGGGTTCCC  
TCAGACTTGGTGGTCACTGAAATCCTCCCCGATACCACCAGCTATGACAATTTGAATTC  
TTTGAAGTTTACAACACCGGCAGTGCACCCGTGACCATTTGGGAAGGGGAGTACACCTTC

GCCTATTCTTTGACGATTCCGCCGATACGTCCCGCGACAAGGCACTGGATCTTGGCGGG  
GAAGTCACGGTAGATGCAGGCGAAACCATTTGTGGTGTGGATTGAGTACTCCAGTTCAACT  
GTTGATACCGCTGCGTTTAGTGAGCAAGACTTCCGTGATTTCTACGGCATGGATTCCCTCA  
GCCCCATCTTCCGAGCAACTGGCCAGGCGGGTCTCGCTAACGGTGGTGATCGTGGCATC  
CGAGTTCTGTACAATGGTGAAGTTTCTGGTTGGTCCCACTACCCATCAGATAGCGCAGCG  
GTTCAAAGGGAATTGACTTCCGCGCTGCCAAAAGTAGGGGAGCAGGCCAGCATTGCAAGT  
GCGCACCAAAAC

>RXN01634-downstream  
TGATCCAACCTCCAGGATCAATTA

>RXN01635-upstream  
AGGGAATTGACTTCGCGCTGCCAAAAGTAGGGGAGCAGGCCAGCATTGCAAGTGCGCACC  
AAACTGATCCAACCTCCAGGATCAATTACTTCTGATCAAG

>RXN01635  
TTGATTCTTGGCGGATTGGACACTCCAGAAGAGCCTGAAGCCCCCTGAAGACTCTCTTTTT  
GAAGGGCGCACTCCCCCTAGGGATGCAAGCACCCGCTTGATCCTCACTGAACATAATGGTC  
AACTCCACCAACATGGGCAGTTCTGATGGTTTTTGAGTATGTGGAAATCACCAACACTACT  
GCCGAACCCATCGATTTTTCCGATTACACCTTGAACCTGTACCCGAGGATGAGTTC  
ACCAACACCAACGAAGCCGTCTGGGCTGCGGAACCTGGTGATGTCAATTATCAGCCTGGA  
AAATCTCTCGTGTTTTGGATCAAAAATGGCCCCCAATGATGAGGCAACCGCAGCAGATTC  
AATGCAGAATATGGCACCAACCTGGAGGCTGGAAAAGACCTTGTGAAATCTCCTCAGGT  
GGGATGGCAATGGTACTGCCAGAGGAATGCAGATTCAGACCAACACTGGCCACATAGTC  
AACCGTGGTTTTCTACAACATGGCTGGCGCTTCTGATGTGAAAGCCAACGAGGGTCTTCAT  
TTGCGAGTGGATGAGTCTGATCTTCTGAAGCAAACGCTTGTCGGCAGCGGTGCGCCAACC  
CCGGGCACTGTGTACACTTCGCAGATTCCTAATCCACTGTCTGCCGTTATCGCTGATTCT  
TCTGTACCACTCATCACAGATAATACCGCAACCAGTATCAACCTTGCGGAGCCGTTTACC  
TTCGCCTTCAAATATCACCGA

>RXN01635-downstream  
TGATGTCCAGGTGCGCACGGCAA

RXN01638-upstream  
AGGCATCAAACCCACAGCACACCACCAGGACGTGCCACGATGTCCATCCGTGGTGAAAA  
CATCGGTGTTGCACAGATGGCACCGCATAGGTGATGACTC

>RXN01638  
ATGAGCACCCAAACAATCACCATCACAGTCCTAGAAAACCGCCACCATCTTTGACGGCCCT  
GAAACCATCTACCGCTATGACCTGGCTGCCGAAGGCATCCTTGATGGATGGGCTCACTCT  
GCTGTGCTGGATCAAGTGAACAAATAGCAGGTGAAAACCTGGCCGACTGTTGAGATCGTG  
GTGGATGGCACCGACAACGTAGTCAATGCACTCACCTCCATGTTTGTCTCAAAGGCGTG  
ACCTGCGGTGGGGTTGGAGTAGAAGCACCTCCCGTTGCGGAGGAACCACCGAAAATTAAA  
CGGCCCCAGAGTGGAAAACAAGTCCGCCAGTTCTACGGCATCAAGCCACTACACCTGTTG  
TTGGTCAGCATATTGGTTGGTTCTATTGCTGGTATTTGGGTGATTTCCGGGTTTCACTGGG  
CCAGTGGACTCACGGCCGGTAGATAAGGTGGCGGAGATTTCAACGCAGGGGGAGACGTCG  
ATAAGCAATCAACCCCAACCCAGCCACCGTGCTCGTGACCGAGGACCTGCTTATTGAG  
GCGCCATTTGGTTTTTGAATGCGAAGCGACGAACAGTCGCGCTACCTGGAAGGCCCCGAC  
CCGAATCTGCGCATCCACGTGGGCGTCGATCCGCTGCACGGCGCGGACGCGCGCTGGTT  
GCCGAAGAGCTGCGCCGCCTGATCACCGAGGATCCTTCGCTGGAGGAAATTCCTCGAGGG  
GAGTGGGGCGAGAAAACCACCATCGACTACCGCGAAACACCCGGCGATGGCTCTCATGTG  
CTGTGGGTGACCTGGTTTTGACACCGACCGACAACCTAACGTTGGGTGCCATAGCAAAGCC  
GCCGAAACCTTGTTTACAAGGCACAATGCCGAAATGTGATTGAGCATCTGACGCTGAAA

>RXN01638-downstream  
TGATGCCGGTTTCTATCCGGAAT

>RXN01647-upstream  
GCTGGGGGAATACATGGCTGAAGGCATGTTGATGCCACGACATCGGCGCAGGTGTGGG

GCATAAATTTCTGGTGCGGCGCATCGAACATGGGTTGGTG

>RXN01647

ATGGGCGATGTGCGCATGATTCATGATCCACTTGGTAGGCGCCGGCGGGCGTGGTGT  
GGGGTGGTGGCGTGCGTGATGTTGGCGGTGGGATCATTGGCGTTGGCTATTTTTCGACCC  
GCGAAGGATCCGCGCGATGCGCGGTTGATCCGCTCTGAATCCGGCGCGCTCTTTGTGCAG  
CTGGATGGGTGCGTGTCATCCGGTGGCTAATGTGGCCTCGGCTCGGTTGATTGTGGGGGAG  
CCGGTGGATCCGGTGAACGCCAGCGATGCGATCATCGCGGGCATGCCGCGCGGAGTGCCG  
GTGGGGGTTCTGATGCGCCGGGGCTTTTCAGCAGCACCGAAGAACCCGAGCAAGATTGG  
TTTGTGTGCCAGGATGTCGGCACTGGGGATCTACACATTACGGTTCTTAGGGGCGGACTA  
GGGCCCCACCTGATTGCGGAAGGAAATGGGTGGCTGGGGGCGTCGAAAAGCGAAACCGGC  
GAGGTCACTTGAACCTGATTACCGCGGACGGGCGCCGCGAACTGCCGGCGTGGGGCAGC  
GAACATGGGCGCATTATGCGCCGCCACCTGGGGATTTCGAGGACACCCCGCGCGTATAC  
CTGACCACTGAGCTGCTCAACGCGATCCCGGAGCAGACGCGGTCCGCTTCCAGCCCCG  
CTGCCCGAGCTTGTGACGCCCTCCACCCGCAACTGGTTACGGCTCGACGGGGCGCTCGCG  
GAAATCACGCCGCTACAGCGCGGGTTGCTTATCGACGCCGGTTCCGGTGTTTTCCCGAC  
CCCACCGCGCTTCTTGGTGTGCATGAAGAAACAGCCAACACCTTGACGCTGCCCGAGCAA  
ACAGTTTCTTGGCAAGATCTGGACGGTGGTTTTGCTTGC CGGATGGTGAAGGCCAGATC  
GGTTTCTTGGAACTCTGGAATCGGGGGTGGCGCTATCTGGTGATTCCAGGGCGAAAAGT  
TTCAGCACAAACGCTGGTGGGGCAGTGGGCGTGGACAGTGGCTTTGGCTACTATGTGGTC  
TCTGATTTTGGGCTGATGCACCTGTTTCTACTGGTGAATCGATGGTTGCCCTAGGAATC  
ACTGACGTGCAGGTGCTGCCGTGGAGCGTGCTGCGATTGTTGCCGCGAGGGAAGTGAATTA  
GCAAAAGAGACAGCGCTCGCGCCACCTAT

>RXN01647-downstream

TAAGGAGTATGGTGGCCTTACAT

>RXN01658

GATCCACAGATCCTGTACCAACCTTCACCCAGCAACAGCAGCTGCGAAACTTCTACGGT  
TTCCCAGACCACTGGCGATGGACCGCTTTGAAGTAGATGGCAAACCTCCGCGACTTTGT  
GTGGCAGCACGTGAGCTCGATCCAAACGCCCTGCAGCAAAACCAGCAGGACTGGATTAA  
CGTCACACTGTTTATACCCACGGCAACGGCTTCATTGCAGCTCAAGCAAACCAGGTGGAT  
GAGGTGCGCCGCGACGTGCGATCCACTCGTGGTGGTTACCCTGTCTACACCGTCTCTGAT  
TTGCAGTCGAATGCTCGTGCTGCAGAAAGCGAAGATGCTGAGGAGCTTGGCATCAAGGTT  
GATGAGCCTCGTGCTGCTACCGACCACTGATTGCTTCTGCGACTGATGGTGCTGACTAC  
GCAATTGTCGGTGACACCGGCGATGGCCAGTCGAGTACGACACTGACACCTCCAGCTAC  
ACCTACGAAGGTGCTGGCGGCGTGGACATTGGAACATGGTCAACCGTGCGATGTTTGCA  
TTGCGCTACCAGGAAATGAACATGCTCCTGTCTGATCGTGTTGGTTCCGAATCCAAGATC  
CTATTTGAGCGCGACTCTCGTTCCCGTGTGGAAAGGTTGCACCTTGGTTGACCACTGAC  
TCCAAGACCTACCCAACGTGTGATTGATGGTGCATCAAGTGGATCGTCGATGGCTACAC  
ACCTTGATAGTCTTCCGTACTCCACGCGCACCTCACTGACGGAAGCGACTCAGGATGCT  
GTCATGCCTGACGGCACCCACAGCCACTGATCACAGATAGGGTCCGTTACATCCGCAAC  
TCCGTGAAGGCTGTTGTTGATGCGTACGACGGAAGTGTGAACCTTACGAATTCGACACC  
GAAGATCCTGTTCTGAAGGCATGGCGTGGCGTGTTCCAGACACCGTGAAGGACGGGTG  
GAGATTTCCGATGAGCTTCGCGCACACCTGCGTTACCCAGAAGATTTGTTCAAGGTCCAG  
CGTGACATGCTGGCCAAGTACAACGTTGATGATTCTGGAACATTTCTTACCAACGATGCG  
TTCTGGTCTGTCCCAGGTGACCCAACCTGCAGCGGAGGGCCGCGAGGAACCTTAAGCAGCCT  
CCTTACTACGTGGTGGCAGCAGACCCAGACCGGTGAGTCCAGCTTCCAGCTGATCAC  
CCGTTCCGTGGACTTCAGCGCGAGTACCTCTCTGCACACATGTCTGCGTCTGATCCA  
GTTACCTACGGTGAAATCACTGTTCTGTGCTGCCTACCGATTCTGTGACCCAGGGTCCA  
AAGCAGGCCCAGGATGCGATGATGTCATCTGACCAGGTGCTCAGGACCAAAACACTGTGG  
CGTGGATCGAACGATCTGCACAACGGAACCTGTTGACCTTGCCAGTTGGTGGCGGAGAG  
ATCCTCTACGTTGAGCCGATTTACTCGCAGCGCAAGGATCAGGCATCGGCCTTCCCGAAG  
CTTCTGCGCGTGCTGGTCTTCTACAAGGGTCAGGTTGGTTACGCACCAACGATCGCTGAA  
GCCCCTATCGCAGGTCCGCATTGATCCGAAGGAAGCGCAGGACATCGAAGAGGTAGATGGC  
ACCGCTACGACGCCATCGACTGATGAGACTGACACTGACACTGATCAGCCTGCAACCGAA  
ACCCAACTGCACCACTGAGTGAGGCGGAAGGAATCGCGGCCATCAACGATGCGTTGAGC  
AACCTGAAGCTGCTCGCGATAGCTCTTTTCAAGAGTATGGTGTGCTGACTCGATGCGCTT  
GATCGTGCCGTGATAGCTACCAGTCCGCACAG



>RXN01658-downstream  
TAGCGTTTGAGTAAACAGCCCCGA

>RXN01659-upstream  
TTGATGCGCGCCGCGGTGAGCAGCCTGCCGATCCAGAGCGTGAAGAATCTGATGATTTAG  
TCGAGATTGATACCGTCTCTGGATTCCGCGCTGCTCAGTAC

>RXN01659  
GTGGCGGGGGTTGCGCAGCGTTTTGTGCGACGAGCGCATTCACGTCGGTTTGGATTCCATG  
CCAGAAGCTGTGACTGCTGTGTGGATGGAATCTGATTGGGTGTTGGCGGAAACCATCAAG  
GGTTCCACGCCTTCCGATTGGGAAGAGATTTTGC GGCCGTTGGCGCTGCTCACGGACGCG  
TCTTTTACGTTGCCACCTCGTTCCACGCGTGCGCAAACCTTGGATTTGAAGCATTGGA  
CCAAGCCGTCTGAAGCCGGAGCAGCCAGAAAAGCCAGCGTTTACTCCCAATGCTTCGGAA  
GAAGATTTGTCTCAGCCGTTGGTGATCCGCCCCGAGGAGCCGTTGCAGATGCCGGTTCCG  
GGTGTGCGAGGAAAGCCGCGGAGTGGTTCGAGCCACGGTCATTGGGTGCGGATGATGTGGAG  
TCGATTGCGGAGGGCGATCCAGAGCGTCCGAGCGATCTTTATGGCACGCGTGTGCTGCGT  
GATCTCAATGGTCAGTCCAGTATTTTCCAAGATTCCACCGACGCGGATGAGCCACCAAAA  
AAGTGG

>RXN01659-downstream  
TAGAAAACCTGGTGTTTTTTCGGCC

RXN01663-upstream  
TATTTTGCTGGTTGGTCCACAGTGGAGCGCTAACCCCGAGAATCCTATCGAGGCCTAAAAT  
CGTGGCTTGAGTACGCACTGCCAGTAAGGTGTGTGATGTG

>RXN01663  
ATGGAAATAAGTGTCTTGATCATCGCCGCACTGATCTTGGTGGCAGGCATCGTACTGTGG  
CGCGCGGACTCGTCTAAACAGGCAGCTAAAAAGGCTGAATCACCTGTGGGCTCAGTCGCA  
CCTGCGCCCCGTGCTGGTTGAAGAAGAGCCGACCCCTGAGTTTGAGCCAGAAGTGGACCCT  
GAACCAGAAGCGCAACCAGAACAGAGCTGGAAGTTGCGCCTAGATTTGCGCCAGAACCA  
GTTCAAGATCTTGAGCCGGATCAGGCTGAGGACATTTATTTTGATGATTCCCCTGAAGTC  
GATGCTGATGTTGAAAATGCCCTTGGCTGAGCTTACTGAGGTAGAAGACTACCCGGAAGAG  
CCAGTGCAGTCTGAGCAACCTCAAGCCCCCTGCCACGGCGGAGGTAGCTGCGGACGAGGAG  
CAACGGGGCGTCGATAAGCATTCGTTTTTGGAGCTCTTTGCCTGGTTGCGAGCGCCGGGAG  
CGCCGAAACTGGGCGGCGAAGCACCACCTTCGATTTTCATCAAGGAAGATGCCTTTTTGACC  
GATGAATGGTCAAGGGGTGCGGCATCGACTGGTGCCGTTGCACGTGATGTGGTCAGTGGC  
ATGGCTGAAGGATATGAAACGCATCTGGTGGATTGCGCGGCGGTGCCCCGTGATGGCGATG  
CGCCGTGAAGTACCTCTGACGTGGTCATTGATGCGCGCCGCGGTGAGCAGCCTGCCGAT  
CCAGTGGCGTGAAGAACTGATGATTTAGTCGAGATTGATACCGTCTCTGGATTCCGCCTG  
CTCAGTACGTGGCGGGGGTTGCGCAGCGTTTTGTGCGACGAGCGCATTCACGTCGGTTTGG  
ATTCCATGCCAGAAGCTG

>RXN01663-downstream  
TGACTGCTGTGTGGATGGAATCT

RXN01669-upstream  
CACCCACAGTCACCAAGAACATAGCCACTCCACACACAACCCTCCACACACAACCACGA  
GGGTACGACCACCATCACCCACCGGATTCAAAGGATTT

>RXN01669  
TTGTACGAGATTTTCGTTCCACACTCCCATGACACCGCCGACTCGATTGATGATGCTATG  
GAGGCGAACTCAGAGGGTATTGAGCGCTGAAGTTTAGCCTTGTATTGATGCTGCTCAGC  
ACGGTTTTGCGAGGCTATCATTGTGTCTTTTTCTGGATCTGTTGCACTGTTGGCGGATACG  
GTTCAACAACCTTTCCGACGCATTGACTGCGATTCCCTCTTTGGATTGCTTTTACTACTTTCC  
CGGCGCGCAGCGACTCAAAAATATACGTATGGATTCAATCGTGCAGAGGATTTAGCGGGG  
TTGTTTATTGTCGCGATGATTGCTCTTTCCGCGATTGTTGCTGCATGGCAGGCGATCGAC  
CGGATGATTAAATCCTCGCCCGATGGAGAATATTGAATGGGTGATTGCGGCAAGGTGTTATT  
GGTTTCTTAGGAAATGAGGCTGTGGCAATGTATCGCATTCGGGTGGTAAGAGGATTGGC

TCGGCTGCTTTGGTTGCAGATGGCGTTCATGCTCGCACGGATGGTTTTACTTCACTTGCA  
GTTGTGCGAGGTGGTGTGGAGTTTTTCTGGGATTCCCCCTGGCTGACCCAATTATCGGA  
TTGATCATTTCTGCGATGATTGCCACCCTTCTTGTGGTACGATCCGTTCGGTTGGCAGA  
CGCCTCATGGATGGAATTGAGCCGGAGTTGGTAGAGAAGGCTACGCACGCGATCTGGCAT  
GTGAAGGAAATTGAGTCGATTGATCGACTGAGGTGAGGTGGGTGGACACCGTCTTCAC  
GGCGATGCCACGGTCAGCACTTCTACATCATCGCTATCGGAAGCCACCGCAATCGCCCTT  
GAGGCTGAGCTTTCCGTCAAACAACATCTTCCCAATGTGGATGAAATGACTGTGACCATC  
ACCCCTTCCAAACCT

>RXN01669-downstream  
TGAGTCCCGTGATACAAATTGTTG

RXN01672-upstream  
AGTAGCAAAGGGTGCAGTCGAAGGACCAGCATCCAAGACTGCTGCCGAAGAAACCGACTC  
CGTTGACAACGGATCCGACGAAAACGGCGAGGAATAATTT

>RXN01672  
ATGGCATCCCGAGAAGTATCCATCACCCGAATCTCACCCTAGCAACCTTCCGAGTTGCA  
CTGGCAATGTCCATCATCGGACTCGTGGCGTGGATCATCTGCGTAACCGTCCCTCTATTTT  
GGACTTAACGTGGCTGGCGTCTGGCAGAACTTCAACGATGTCATCGGCGGTGTTGGTGCA  
GAACAAACCATCACCTTCGGGCTCGTCTGAGCATTTCCGCACTTCTGGGAGCTATCGGA  
GCGATTACCGTCGCTGTGCTTGCAACATTGTGTGCAATCATCTACAACTCGATTGTTGAC  
CTCTTCGGTGGACTGCAGATTCAACTGCAAGAAGAAGTAGAC

>RXN01672-downstream  
TAACCTCTGAAACACAAACCCCT

>RXN01694-upstream  
CGACACCAATAATTTATTGGGTATCCACCAATTACCGCTGTGAGCACTGCAAATTACGTA  
TTGAAAAGCCATGTCCACCAGTGTTCTATCCTGGCGGC

>RXN01694  
ATGCAAAAAATCACCCCAACATCTGGTGCCAAGGCACCGCAGACGAAGCAGCCGAATTC  
TACGTCAATGCGTTTTCTGAGTTTCCGGGTGGCGCAGAAGTACTCACCACAGTTAAGTAT  
CCCGAAGCTGGCTTGCTGGACTTCCAGGAGCCTTTCGCGAGGAAAACCTTGACGGTGGAA  
CTCGCTATCTCAGGCTTTAAGATCATCTTGATCAATGCTGGTGAAGAGTTCACTCCCAAC  
CCATCGATCAGCTTCATGGTGAATTTTGATGCGGTGCGTGATGAAAATGCCAAAGAGCAC  
CTTGATGCGGTGTGGGAAAACTCCATGAAGGCGGCAGCACACTGATGCCAGTCGATACT  
TACCATTTTTCGGAATACTACGGGTGGGTACAAGACAAATATGGTGTGAGCTGGCAATTG  
ATGCTCAGCCGCCAGAAAGAAAGCCAGGTCCCGCAGTAATCCCAACGCTCTTATTTGGT  
GGGGCAGCTCAAAATCAGGCAGGCCAGCTCAAGAAAACCTACGTTGAGGTGTTCCCGAAC  
TCCCAACTTGGTGATCGTGCACCTTATGGACAGCAAACAGGTCCTGCCACTCCTGAGGCC  
CTCATGTTTTCCAGTTCCAACTCGACGGTCAGTGGATTTTCGCGATGGATTCCGGAGTT  
GAGCAAGATTTACCTTCAGTGAGGGTGTCTCATTTGATGTATGAAGCTCATGGTCAAGAA  
GAACTCGATGCCATCTGGAATGCACTCTCGGCAGTTCCAGAAGCTGAGGCTGTGGTTGG  
TTGAAGGACAAGTTCGGCGTGAGCTGGCAGATTGTTCCCGACAACATGGAGGAGCTCATG  
GCTAAACCCGGCGGTATGAAAAGCTTCTTGCGATGAAGAAGATCAATATCGCGGAGTTC

>RXN01694-downstream  
TAGCAGTTCTAAGCGCTCCACGC

>RXN01696-upstream  
AGGTGACGGTGATACAATTTTGCCATAACTGACTTAACCCAGAACGTTGTCCGGAAGCAC  
ACAGACCTTTGTGCGGCTTCCTTTCTAGGAGCATGTAAC

>RXN01696  
TTGTCTACCCCAATCGGCCTTGGCCTTCCTCCGACCCACCTCCAGTGTTGGCGCCACGT  
CGTAAAACACGCCAACTCATGGTCGGCAAAGTGGGCGTTGGTTCGGATCACCCGATTTC

GTCCAGTCGATGACCACCACCAAAACCCACGACATCAACGGCACCCTGCAACAGATCGCA  
CAGTTGACAGCCACCGGTTGTGACATCGTCCGCGTTGCCTGCCCAAAGACTGTTGATGCG  
GAAGCACTGCCGATCATCGCAAAGAAGTCTCCGATCCCAGTGATCGCAGATATCCACTTC  
CAGCCCAAGTACATCTTCGCGGCAATCGATGCAGGTTGCGCCGCCGTTCTGTGTGAACCCA  
GGCAACATCAAGGAATTCGATGGTCGCGTTAAAGAAGTAGCAAAAGCTGCAGGCGATGCC  
GGAATTCCAATTCGTATTGGTGTCAACGGCGGATCCCTGGATAAGCGCATCCTGGACAAA  
TACCACGGCAAAGCCACCCAGAAGCTCTCGTGAATCCGCAATGTGGGAAGCCGGCCTG  
TTTGAAGAGCACGGCTTCGGCGACATCGCAATCTCTGTGAAGCACTCCGACCCAGTACTC  
ATGGTGGAGGCCTACCGCCAGCTCGCTGAACAAAGCGACTACCCACTGCACCTCGGTGTT  
ACTGAAGCTGGTCCCAAGTTCATGGGAACAATCAAGTCTTCCGTAGCATTCGGCGCTCTG  
CTGTCCCAGGGCATCGGCGACACTATCCGTGTGTCTCTTCTGTGTGACCCAGTGGAAGAA  
ATCAAGGTTGGCGACCAGATTCTGCAGTCCCTCAACCTGCGCCACGCAAGCTGGAAATC  
GTGTCTTGCCTCATGTGGCCGCGCACAGGTCGATGTGTACTCACTTGCTGAAGAAGTC  
ACCGAAGCACTCGACGGCATGGAAGTCCACTGCGCGTCTGCTGTATGGGTTGCGTTGTT  
AACGGCCCAGGTGAGGCTCGCGACGCTGACCTCGGTGTTGCATCCGGTAACGGCAAGGGC  
CAGATCTTTGTCAAGGGCGAAGTCATCAAGACTGTCCAGAATCCAGATCGTGGAACC  
CTCATCGAAGAAGCAATGCGTATCGCAGAGGAAATGGACCCAGAAGTCCTCGCTGCAGCA  
AGTGCTTCCGGTATGAAGGCTGAAGTGAAGGTAACCAAG

>RXN01696-downstream  
TAAGTTTTGGTTAATTAAGGCAC

>RXN01697-upstream  
TAGATCAACTAAGTATGAACGCAATCCGACTTTGGTCTGACTGCAAGAATCGACCAGAG  
CCCCATTAAAAATGCCCGCGCAACGAACTAGTAATC

>RXN01697  
ATGTTTCAAGGACTAAAAGAACTCACCAGCAAAAAGGCCGACGCTGCTGATCACCGTC  
ACCGTCGGGCTGATCGCCGTGCTGGTTACTTTCTCTCTGCCCTCACCGCCGGGCTTGGC  
CACCAATCAGTATCCGCACCTGAAATACCTAGCGGGTGATAATGAACCTATCCTCGCCGAT  
TCCGGATCCACCACGCTTTCCGCGTCCACGCTTTCTGTATCAAGCAGTTGCCCAACTCGAA  
GACGAAGGCGCACAGATGCTGTGGCAGGTCCGCGACCGAGTAGCAGACACCCCCACCATG  
CTCCTCAACTCCCCTGACCTTGCGCCTGGTGAAGTATCCCTTCCCTGCCGAACCTCGTGTAT  
TCGGAACCTCGTACTGCGCATGATGTAGTGGAATCTTCCAACGATCTGTACCTCGATCAC  
CTGCCCGTGGTATTGATGAACACCTCCGATTTAGCCTCACTCGCGCAAGTCCGAGGCGTG  
ACAGGACCAGCAGGCGCATTCGCCTCTGACGTGCGCTCCCCCTCCGACACCGTTGCGCTC  
TCTGGATCCGAACGGTGGAAACGCATCCGCTCCTACCAGGGCGAACAGATGTCACTCAAC  
CTCATGATCGTATGCTGTATGTTATCTCCGCACTCGTGCTCGGCGCATCTTTCACCGTC  
TGGACCATCCAACGCCCTCCGCGGCATCGCCATCTCTAGTGCTTTGGGAGCAGCCCCGCGA  
GTACTTATCGCCGACGCTCTCGGCCAAGCCATCATCGTCTTAGGAATCGGCATCACCGCA  
GGCATTGTATCAGATCATCTCCGCACTTCGGCATGGGAGACGCAATGCCCGTGCTCATC  
TCTCTCCACCAACGCTCTTCCCGCACTTATCCTCGCCGAGCAGGACTCATCGGTGCC  
GCCATTTCACTCGGCCCATCTTCCGCTCGAACCACGCTCCGCACTCATGAACGCA

>RXN01697-downstream  
TAAGAAAAGGAACCTCACATGAC

>RXN01701-upstream  
GCCGATCAAATTCATTGATTGTTAATCGGAAGTTTTTTGAACAGGTAAAGCTAGGGGACC  
TGTTCAAGTGCCTGTTGGCGGATGTATTAAGGAGAATGCC

>RXN01701  
ATGCTGAGCCACGAAGAAATTGTTGCGATCGCAGAAGATTTGCTGTCTAAACGCTACGGC  
GGTGTACAAACTCTTTCTGACGTGGAGCAGCTCAACGGTTCCGGCACCTCCGCGGTGCTG  
CGTGCCAGGGTGGCTAACTCCCCATTCTCCAAACAGCGCTCCGTGGTGTGAAAGTACGTG  
CCCAGCACCGGAGACGTCTTTGATGATTCTGCGCTGGTGGTGAATCGTCTCCTACCAG  
TTCACCACCTCTTGTGCGAAGATGTCCGCCAGGGCCAGTCATTTTGGCCTATGACATT  
GACAAGCGCATCTGGTCAATTCAGATTCGGGCAACGGCGACACCTTTGCGGATCTGATC  
GATCAGCGTCCG

>RXN01703-upstream

GTTAGACAAATGGGTAAACAGAGCTGACCTAGCGGAATCCGCCATCAACGAAAGGCATTCCGCGAGGGTTTGGGGTCTGCCTCGAACAAATCTTGGGTTT

>RXN01703

GTGGCATGGCCATCCAACGCCAAAGAAAACTGTTTATCCACTGGCACTACTGGTGGCAA  
GCGCATTATCTAGACTGCCTGGTGGATGCTGCTCGTCGACGCACCACAAAGGCCCGTCGC  
GACCGCATCAGGGACACCATCCGCGGCATTTCCGGTGCGCAATGTGGGCAAGCTGACCTCG  
AATCGTTATTACGACGACAAAGCTTGGCTGGCCCTTGCTCTTGGGCGTGCCGGAAGAGTG  
CGAAAGGTGCGCACACCAAAATCATTTGCCCTCGTTGGAACAAACATCGTCGATGGCATT  
GATTCCCTTACTGGTGTGCTGCCGTGGCGTTCCGGCGAAACCTTCTACAACGTTCCCTCC  
AACGGTCTGCTGCGATCATGATGGCCCCGACCGACCGTTTGGACGAGGCTATGAAAATC  
ACCGATTGGATTTTGCACACCTGATCGATGGCGACGGCCTTGTGATGGACGGATTGCGC  
ATGCGCATGCACGGACCTGAGCTTGTCCGTTCCATCCACCCGTATTGCCAAGGTGTGCGC  
ATTGGTGCCTGTTTGGAAATTGCTCTCAAACCTGCGTGAGCGCGCAGGCTTGACCCTACT  
GTGGTGGATCACTGGTCCGATGCCGATAAGGCAGAAGACTCCCTCAAATACTTTGCACAC  
ATCCACGCTGTGGTTCAGGCTGTGTCGCGGAAGATGACCAACTTCCACGGCGTTATTGAT  
TGGGACACCCGGTGACGCGACGGCGGTTTGTTCAGGGCATTTTGGTCCGCTATTTAGCT  
GATGTGGCCATCCGCTGCTGACGATTCACCAACCAACCGGGAAACCAAAAGATTGCA  
GCACGCTTGGTACTGGAATCGGCGGAAAGCGTATGGAACCAACCGATTGGAAGTTGATGGC  
CTTCCGGTATTCGCCACAGACTGGACAACGGATGCACGCTGCCACAAAACCTTTGGTTTG  
AGTTCCTCTAGTTTGGAGCGATCTGGTGAGTGTTGTGCGCGTGATGAACGTGATCTGTCC  
GTGCAATTGTCCGGTTGGATGCTCATGGAAGCAGCAGCGAAAGTGGCCGAAGAACTGGAA  
AACACCGCAATAGTTACACCGGTCGCTCCCGA

>RXN01703-downstream

TAGCCCCGATAGTGATGTGCTG

>RXN01709-upstream

GCAAGTGGAACACGATGGGAACGGTAAGTCTGCCGCTGCGGTATTACTCGTAGTTTCA  
GAAATTAGGTGTGATGCAGCAATACGGAACCTTTGCCAAT

>RXN01709

GTGTTTGAACAAGCTCTCGGGCTCACCACCCTTGCACAAACAGCTGGAGCGGGCGCAGCG  
GGGGGCTTGGGTTTTCATGGCAATGGCGTTGTTGTCTGCAGGGATGCGCTCCGGCGTGGAC  
ATGATTCTTAATGAAACCGGGGGTGAAGAGATGCTTGCACAGGCAGATTTAGTCATCACT  
GGAGAAGGACGCATTGATGCACAGACCCTCAGCGGGAAAGCTCCTACTGGAATCGCCAAA  
CGGGCAGTGCGAAAGGAATTCAGTACTGGCGGTTTGTGGGCAGAGCCTATTGGGTCCA  
GCAATCTCAAATGAGCTATTGGAAGACATCTACAGCTTTACCGATTTTCAATCTGACATC  
AATGAATGCATTGCAACCCGCTCCCAATTTTGAAGGTATCGGTTTTAAACATCGCCAAA  
CATCATCTGAGT

>RXN01709-downstream

TAGCGATATTTACAGCAAACCGAT

>RXN01711-upstream

TCTCGTGAGTTTCTCCCCGGTAGCACCTTCTATATCAGCCCCACGCCGCTCGGAGCAG  
GTGGGATAGCATCGGCAACGCGGTTGCATGGCCGTTGGCC

>RXN01711

ATGTTGTTGATGGCGCATCGCTTCTTCGTGCTTGCATTAACGGCGCAGTCACCGACGAT  
TTCACGACGGTTTATAGTGCTTTACGACGTTTCGTTGAAGGTATTCCGGTCTACAACGAG  
GTCTACCACTTCGTGATCCGCACTACCTCTATAACCCGGGCGCCACCCTCCTATTGGCA  
CCATTGGGATATATCACCATTTACGTTGGCTCGGTGGATGTTTCATCGCGGTGAACCTC  
CTTGCCATTGTTTATAGCTTCGGGCTGCTGACCAGACTCTCCGGTTGGGCGCTGCGCAGC  
ATGGTGTGGCCGATTGCGATCGCCTTGGCGATGCTGACAGAAACCGTGCAAAACACCTC  
ATTTTCTCCAACATCAACGGCATCCTGCTGCTCATGTTGGCGATTTTCTGTGGTGCGTG  
GTGCACAAAAATCCTGGTTGGGCGGACTAGTCATTGGTTTGGCCATTTTGATCAAACCC

ATGTTCTCGCCACTTCTCTTCTACCTTTGGTGAAAAAGCAATGGGGATCGCTCATCCTC  
GGCATTTTTAACCCAGTGATTTTCAATGCAGTGGCCTGGTTCTTAGTTCCGGGAGCATCT  
GAATACGTACCCCGACGATGCCCTACCTTGGTGAACTCGAGATTTTGCCAACAGCTCA  
CTCCCAGGCTTGGCCATCTATTTCCGAATGCCACCTGGATGGAAATCACCTGGTTCTCTC  
ATCTTCGGCGCAATGGTTCGGCCTCGCAGTGCTGGCACTCCTGAGATTCGGTAACACCGAG  
CCATACTTCTGGGCAGCAACCACCACCGGTGTACTCCTGACTGGCGTATTCTTCTGTCC  
TCACTGGGACAGATGTACTACTCCATGATGATCTTCCCTATGATCTTACCCTGCTCGGA  
AGCCGATCCGTATTCCACAACCTGGGTTGCCTGGGTCGCCGCTACTTCTTACTATCCCT  
GACACTTTCACCTCCCAGCGACTACCCGATGTAGCCGCTGGATGGAATTTTTCAGCGCG  
ACCGTTGGTTGGGGACTATTGATAGTGGTTACATTTGTCTCGGCGCTAATCTGGTTTATT  
GGTGATATCCGAGCCAAGGGAACCTCCGAGCTACCCATTACCACTGATCCAACGCACGAC  
CATCTTGAGAGGACAGCA

>RXN01711-downstream  
TGACAGACTTCAAATCATCAGC

>RXN01721-upstream  
TTCGCCAACGCCGCCCGAAATGATCGGGAGGGGGCGTCGAAAAGCACTTCTGCGAGCAT  
CAAACATGATGCGTACCTGCCACCCGACAGCGCAATCGC

>RXN01721  
GTGCTTGTGGACAGATTTCGGACGCATCGCGCGTGACCTGCGGGTGTCACTGACCGACCGA  
TGCAACCTCCGCTGCACCTATTGCATGCCCCGCGAGGGTTAGAGTGGCTGCCACCGAG  
CAGACGCTTAACGACGCCGAGGTGCTGCGACTCATCCGCATTGCGGTGGTTAAGCTGGGC  
ATTCGTCAAATTCGATTACCGGCGGCGAGCCTTTACTGCGGAAAAATTTGGAAGACATC  
ATCGCCGGCACCGCAGCCCTGCGCACCGACGAAGGCGAAAAAGTTCACATCGCTCTCACC  
ACCAACGGCCTTGGCCTAGACAAACGCATCGCAGGACTGAAAGAAGCTGGTCTTGACCGG  
GTCAATATTTCACTCGACACCATCGACGCCGAACGCTACGTCCTCGCTAACCAAGCGTGAT  
CGATTGTCCGGTGTGTTGGCGTCCATCGATGCCGCTGTTGCCGCTGGCCTTCACCCAGTG  
AAGATCAACGCCGTGGTTCATGCCTGGGGTCAATGAAGTAGATATCGTCCCCCTTGCGGAA  
TACTGCATTTCCAAAGGCTCCCACTGCGATTTCATCGAACAATGCCACTTGGCCCCGCGC  
GAGCAGTGGAAACGCGCGATATGGTTCACAGCCGAAGAAATCCTGGCGCGCCTGGAAGAA  
AAATTCACCTTATCCCCCGCCAAGGAACCCCGAGGAGCTGCACCTGCTGCGCTGTGGAAT  
GTGGTAGATAAATCCAACCTGATATCACTGGACAAATCGGCATCATCGCCTCGGTGACG  
CACCCATTTTGGCGGAGATTGCGATCGCTCCCGCTCACCACCGACGGCACCATCCGAAAC  
TGCCTTTTCCTCCCGCACTGAAACTCCCTACGTGACGCGCTTCGCGACGGCGCCTCCGAC  
GATGAGCTCGCGCAACTGTGGGCAGGCGCCATGTGGGAGAAGAAACCCGGCCATGGCATC  
GACGATGAAGGCTTCCTCCAACCAGATCGCCCCATGTCTGCCATCGGGGCTAGCCCATAC  
CAG

>RXN01734-upstream  
ACGATCTGCCGAGAATCTCAAGAAAGTGCTCACTGCGCAGCACACCGTCACCGTCCAAG  
ACACCGGCACCGGGCGGATTTCACTCCTGGATGTGCAACC

>RXN01734  
ATGACAGATCCAATTGAGCAGGCATTTGAACGCATCCGCGCCGAAGCCATGCGCAGAAAT  
GGATCCGTTCCCGACCTCAATAAAAAACGATGCTTTTCGACGCCACCTGCGCCGAAAGGG  
GGCGTCGAAAAGCGCAAAAAAGGCCGTGCAAGCGGCCCTAGACGGCCGCCAGAAACGATAT  
GTGCGCGGCGCGGAGTCGCTGGGATCGGTGCTGAACAAGGAAATTCAGCGTCGTGGCTGG  
GGCAAAGACATTGCCGCGGTTGGGTGACGTCCTCACTGGGAAGAGCTTGTGGCGCGAAG  
ATTGCGCAGCATACGCGCGTGGAATGATCAAAGATAAGAAGCTTTTTATCACTTGTGAT  
TCCACAGCGTGGGCCACCAATCTGCGCATGATGCAGCGGCAATCCTGCAGGTAATCGCT  
GAAAAAGTGGGTCCAAATATTATTACAGAGCTGCGTATTTTTGGGCCTCAGGCCCCAAGC  
TGGCGCAAGGGGCGCTTGACGTAAGGACGCGGTCCGAGAGACACATACGGA

>RXN01734-downstream  
TAGTTTGGTGATAAAAACCGTCG

>RXN01742-upstream

TGGCTAAAGCGATGTGTGTCTCATCTGAAAAATTTCCCCCAAACCTTAATCGACACAGTTAC  
TTCATCTGGCCTTATTTTCATCACAGTTACAATCATCTGTC

>RXN01742

ATGCAGGAAAAGCCAGAGATGCCAGCGATTGAGGTCATCCGTTTCAGCGAAACGCACCAAA  
ACTGTTCAAGCTCGAATTGTGGACGGGCAAAATCCAGGTGCGCATCCCTGCGAGGATGTCT  
AAAGCGGATGAAGAAAAGCGGTGGGGGAGATCGTCGCAAGCTAAAGCGACGCCCA  
TCGGCCGTCTCAAGCGACGCTGACCTGATTGAGCGCGCCCATTAAGTTGAACAAGACTGTG  
TTGGAGGGGGCGGGCGGGGTGGAAAGTATTCGGTGGGTGAGTAATCAGAAGGGGGCGGTGG  
GGGTCGTGCACGGTGGCGACTGCGGAGATTCGGATTTTCGGATCGTTTAAAGCACGTGCCG  
GATTATGTGTTGGATGCGGTGTTGGTGCATGAGCTGACGCATACGTTTATTGCGGGGCAT  
TCGGCGGAGTTTTTGGGAGTGGGCAGACAAAACGCCCTGGCAGAGAGGGCCAAGGGCTAT  
TTGGAGGCGTATCAGCGGTGGGGC

>RXN01742-downstream

TGAAGGTTTAGTTCTTGTCTGGAG

>RXN01754-upstream

TGTGGCTGAAGACAAGAATGAATAGCATTCATCTCGTCGAATTTTCATGTAGAAATTTGTC  
CCCCTTTTTTTTTGGATGTGAAAGTTGAATCGGTAAGCTCCT

>RXN01754

GTGAAAATTAAATCCGTATTTTTGAGCACCGCTTTAAGCGCTTCCTTACTGCTCGGAATC  
ACCCACCCGTGCTGGGAGCAACGATCAACCCAGTTTGCCTCTTTCTGCGTTGAGCTCC  
TCGGACGATATCGCCGTACCCAACTTCGCCAAAGAATTACCGTTAGCTTTTGATGTACCA  
GCAGGCACTGTTCCCCAAAGCTTGAGTGGAAACGCTGCAGATTCTGCGCGAGTTTCTGGC  
GGCGTCGTGGAGTTTTATGACGGTGACCGGCTCTTTCACACCCTGCGCCTAGAAGTTAAT  
GATTCCCCGAGCACACATTGAGGTTCCGCTGCAAGCGTTCCCTGTCGAAGACGGCCGCGCC  
ACCTTTTGGTTGCGCGCCATGTTGGATCCTGTAAACAACAGTGGTGTACGAGGAGCAG  
GAAGTCCGCTTCTTAGACGGAAACGTCACCTTTGAAGGGGGCGACGATTAACCCAGCTGTG  
GTGGCTGATTACTTCCCGTCAGTGCTGCGCGCGTTGACAATTTACGTCCCGGAAAACCCC  
TCTGAGGACAGTACAAGAAGCCACGTTAGAGGTTGCGACCTCCCTGGATTTCGGTGTACCGA  
AGATCAGGTCTGGATGTCAACGTAGAAAACGCTTCCAACCGGCACCGATGCTCCTCCTACA  
CGTCTCTCAAGATTTTGAACGCCAGATTGTGCTGGTTGACGAGGCAACAGAAAGTAACACG  
CAAAAAACCGAATTGGTCAATCCCGGCCAAGACAATGCATTCTTGCGCCGTGAACGGCAAC  
GCCGACGAGCTTTACGATCAAGCGCGCTTGCTTACCGACGCAACCTGCCACTTGCCGTA  
GACACCGAAGTAACGGCCTCAGGTTTTTGGTGTATGTGCCCCAACCTTTCTACAGATGTGGCC  
ACCCTCCAAGAACTGGGTATCACGCAGCTCACCTCTGAATCAGTTGCGCGCACAAAGCGTC  
ACCTTGGGCATTGAACGCTCCCGCCTGCGGACCTACTCGCAGTCCATGGACCTGCACATA  
ACGGGAACCTACACCCCATTTGCCACCCCAAAATGCAGGACAGATCACGTTCTCCATTGGT  
GACACCGTGTTGGATCCTTTGACCACCGATGACACTGGCATCATTGACCGTGAGTTCAAC  
GTTCTTGGAGACTTGGTCAACCGCTACACGGCGATCGTCGTGGAATTCACCAGCACCGGC  
GACGTTAATTGTGGGGTCACCCAGCCCGTAGGCCTCAACATTGATTCCGACAGCCTTGTC  
ACCTCCCAACATTGAGATGTTCTGTACTCAACGGCTTCCGGTCCCTACCGCAGTCCTTC  
CAACCTCGTGTGGACGTGGCGTTTGCTGATCCAGCGTGCAGGAACCTCTCCCGCGCTGTC  
AGCGTAGTGTGGGAATTCATCTATGAGCTCCAGCGCATCCGCCACACCTGGTTAAC  
TGGGATGAAGCCGTAGCCAGCGAGCGCCCAACAATTTTCATTGATGCTGCGGGCGCAAAG  
ACTGATCAAGTGCCAAGCTACCTCGCCCAACAAGGCCAAACCTAGAGATCACCAGCAAG  
AACGACCAAAATGCGGACGGCGAACAATCAACCGATCCCTGCAAACCAACGCTGCGCTT  
GTTGTCGGTTCCATTACGGCCGTGTGGGATGCCGATAAGAAGCGCACGGTGATTGTGGCA  
AGTTCCCAAGGACAACCCCCCGATTGTGGATGCCTTGATTTCGTGGATGGGAGAAGACCGC  
GAACGCTGGAGTGATCTCAACGGCGACCTGATTGTCAAAGTCCGAGACCGCGAACCTGTG  
CAATTGACCACCGTGAAGCCCCAGATCAGCCTGGTCGATCGGCCACAGCCTTTATTGCG  
ATCGGCGTCAGCCTTGTGGTCATTGCCCTGATTGTGCGAGCCGTGGTGTGAGTGTCCAGG  
CGTTCGCAAAAAGGATACAAA

>RXN01754-downstream

TGATTTCTTCTTTACCCAGTAGA

>RXN01761-upstream

TTAAAGTTTCTATATTCCATTCTAAAATAACTTTGAATTGGGGATTAATGAAACTTTT

AGCAATTGTTTAAAACGAATATTGAGGGGGTGGCGGGCAA

>RXN01761

GTGACTGCGACAGTTTTAGAACCGCAACCTGTACAGCTTAGTGAGCAGGACGTAGATGCT  
GAGATTGCGCGCATGGAGCTTAAACACAACCGACACAAGACGTGGCGACGCCGAACGATG  
GCTGTTGTCATGACGCTCTTGATCTCAGTGGGTTTGAGCTTTGGTGCCTTTGGTAACAAG  
GAACGTGAAGCTAATGCTTTTCGCCAGCGCTATTATTGCCAGGTTGTTCGGTGCCTATGGGC  
GAGGTTGCCCTTTGAAGCGATTGTGCCAGTGATGGTGACACCGAGATGCTTCTTAAGTGC  
ATCACCGAGAACTTAGGTGAAATGCACATTATCGAGAAGTGTCTCGAAGCAGAAGATGTC  
TTGAAGTGCTTCTACGATGCGAAAAACGAAGAGCAACGTAAAGAACAGAACCTTGATAAA  
GCCCCGTGATTACTCCATGTACCGTATGGCCTCTGCGATGGCATCGTTCCTATGGCAATGGT  
CGGGCAGCTACTGCCGTTGTAGAGGAAGGCGGACCGAACGAGTTCCTCGATTCTGAGGAC  
GCCGGTCTTAAGGTGTGGGAGGGCATTCTCAGTAAGGCCGCCAACGGAGGCAATGTCCTT  
GGTTATGCTGACGCGAAACACAACGAGGACTCTGGTTGGTTCCTTTGGTAATGGTGTGGC  
AACAACGAGAAAAACGTACTCCTATGATTCTCTAGCTGATCATGCCTTTCAAGGGCCTTAT  
CACTTTGCATTATTGGCGCGACACTGAGTGGCTTAGGCTTTGATAGCTCAAAGGCGGAG  
GATTCGCAGACTGATTTTGCTCAGCGTAAGGGCATGGGGTACGCGATGATGATCGCGTAC  
ATCATCTCCGAGGCATTGATCTGGTTTTTAACACTGTGCTGAATATCTTGAGCACCATA  
AACCCATTTAGACTGCTCGTTGGACCAGTATCTCAGAATACTAACAAGACATTCACTGAG  
AATATGGCTGGTGGGCAGACCACAGAAGGAACACCGTTTGAAGGAATGACTGATTTCTTC  
GGGTTGATCTATAACTGGTCAGTGACTGTGGGCTGGCTCATCGGTATTCCTGTCTCCATT  
GGTCTGTTTATGATGGGTGCGTTGATGTTTCGACGCATGGACAAGGGATCAGCGTTTAAA  
AAGGTTGTTATCCGCGTCGTGTACGGTGTCTGCTGGCCTGCCACTGCTTGGTGTCTCTTAT  
ACCGGTGCGCTGGATTCCCTTCCTCGACAGCGGTAGTTCCACAAGTGTGGATCAAATGCG  
ACAAAGATTGTGTTGTCCACCTACGTGGATTTCGAATCATGGGCAGAAAACACCCGTATG  
CGTGTTCCTGACAAAGTAACACTGGCGTGGAGTCTGGAGGATCAGGCGCCAACAGGGCAG  
TCCATGCGGATGGTACGCAATTCGGCGTTGGAAATTAATGCTCAATCAAATGAGAGTTTT  
ACTACTTTTAAGAATCCAGGTTCCATGGATCTAGGCTATAGCATGGACTGGATGGAAAAG  
ATGGCGGATCCAGCCAATTCTGGCACCGATGGGACCTCATCAAGTTCGGCGACGACTATT  
TTCCAGGGAACCATCGCGCTACTGAGTCGTTATATCGACAACGACAGTATCTCCTCTGGC  
AGTTTCGAAACCTCTATTGGAAGTGCATGGAATCTTTGACCTCGAAAGAGGGAAGTGGC  
GAAGCTGTGTCGGTGGTGTGATGTAATGGCCTGGGTTACTGGTTACAACACAGCCTCTGGT  
CTTAATGAGATCACTGCTGCTGAATTAGCTGATGCGAACAATCCATTGCTTGAGGTCAGC  
GACTCAGCTGGTCTGCAGGGACGACCTATTGACCGCAATGCGGTGTCAATTTAAATCTGGT  
GATGCGACAGCGTCATGCAACAACTCAGTCGTGACAGGTTCTCGTGTGTGGTTCGGGAC  
TACCGAAGTGACTGCAATATGTGCGCCTTGACGATGTACAACCTCCTCAACACCTCATTC  
CATCCAGCTGATGCAAGTGTCTTTTCTACGTCCACTTCTGCGTCAAGCTACACCCGTGCA  
TCGCATAGCGCAGTGAGTCTTATCGGTTCTGGTGCCATGAACCTTGTGTACTGGTTCTCT  
GCAATGTCCCTGATGGGTAGCTTCATCGTGATCGGTATCGGTTACGCCGGTGCCATGCTG  
TTTAATAGCTATTCGACGACGCTGTGCTCATTTGGTGCCGTTCCCTTTTGCTGCGATGGGC  
TTTATTGCTGGTGTGGCAAGGTCAATTGTGTACACCATCGCTATGCTCGTAGAGGTTATC  
GGAACGATCATTTTGTACCAGCTCATTACCCGGTTCTTGATGGCTGTACCAGCACTCTTT  
GAACAACCTTTGGCTGATTCTTAAAGTAGTAACGAGAGTGTGAGCTGGTTGCCGGTGTCT  
GGTATGGGGCTAGTCGGTATGGCACTAGCTACCTCAGGCAACTGGGCGATTGCCGGCATG  
GTGATCACAGTGGCCTCATCCATGGGGGTGATCATCTTCACGATTATTGCGATGAAGGTG  
CGCGGATCTTTGGTATCAGGTGTGATGAAACCGTGACCAGTGTATTAAACCGCTTCTTG  
GATACACAGGTCTCTTCTGCAGGTGCTACCTCTGGTGACGGCATGATGCGTGTGTCAGCC  
GCAACGGGTCTTGGTATTGGTGCGACACATATGGTACTCAACCGTGATGGTGACGGTGGT  
GGATCTGATTACAGGCTCTGGTGGATCAGGTGGCGGTAGCGATTACGGCTTGGGTGAGAAG  
GCTGCTGGTCTGGCGAAGGTTGTCACAACTGTGGCTGGTGGCGGATTAGTCGGTAAGTAT  
GCTACGGATGCGCTCGATAATTATGCAGATGGCGTTATCAACGGCGACGGTGTGGTGGC  
TTCGACGAGGTGGTGACGCTACCGTTGATGGCGACTATGTAGCAGATGGAGATGCAATT  
GCTTCTGCTGATGCTAACGCTGATTTTGTAGACGGTGTGTTGATGGTGTGCTGGTGGCGC  
TCATTTAGCAATGCTGCGTATAGCTCCGATGGAACCACTCTCGACGGTGAGGGTGCGAGC  
GTTGATGCACAGGTAACCCGCTTCATGCTGATGGCACACCAATGAGTGTGCTGTAAGCT  
GAAATGAAGATGGCTGGTCTGAGCTCGTCAGGAACCATGATGGAGAAATCTGGTGTGAAA  
TCGAGTGGCATTACCACTGCAGCGGATGTATGGACGATCAGTCTCTGGCAAGCAGTGTCT  
ACTGAGTCTGGTCTGTCTCAAGATTCCAGACACCTATGGTGCAGATGTCTCGGGTGTGCG  
GGCACAGTCGGAACCTACCGGTGCTGATTACAGTGCGACCGATTCAAGCGCAGGTCTGAAC  
ATGAGCGAGGCTGCATTGCAGAGTGGCACCCCAATGGGCGCTCTCGCTGGTGGATCTGTG  
TCGAGTTCCGATCAGGCCATGAATGACGCGAGCTCTTCAGATTGCAGCGTCTCAGGGTCTT

GCACCAGCAGGTTCCATAGCTGGTATGGAGCAACTTAGTGCTCAAGCCACTGAAGCACCT  
GCTGGAAAGGCCGGCAAGCAGCTTGGCGATCTTTCTGGCTCAGCGCTCAATACTCAGCTG  
GCGTCCATGGGACAGCAGGTAGGTGACAGTGTGAACAGCGCTTATGCTGCAGGCGGTATG  
GGTGGTGTGATGTGGCTGGCAAGGTCACCGAGGCAGCACAGCACTTGTCTCAGGTTCCA  
GGTCAGATTGAGAATGCTGTGACCAATGCGGATGCTGGTTCTCTGGCGCAAGCTTTGGT  
CAGATGGCACAGGGGGCAGCTGGTATTGCCGGTGTGCGAGGTGTGATCGGTGCAGCGGGC  
GCAGCAAGCTCTGCAGCACAAAGGCGCAGGTACTGTCCAGGGTGCATGGGTAAATGCTGCA  
GCTGGTGCGGGAATGATCAACAACGCTGTTTCCGGTGGAGCTACTGGCTCAACAGGTGCC  
GCACATGTGGTCAATGCATCACATGGACCAGTGGCGCCTGGTCAGGCTCACTACCAAGAG  
TCTGGTCATGCACAAGCATTTGTGAGAACAAACCAGGCCAACACCGCGCACACAGCAAAC  
ACGCGTGCACCGTCATCAGCTCAAATTATGGGCGCGAACGTTGCTGGCTCACTGGCATCA  
CAGGCTGTACGAGGAATCGGTACGCTGGTCAGATGGGTGCTAATGTTCCGCGACGCGATG  
GGTGGCAGCGGACGCTCTGGTGGCCGTGGTGGAGCAACTCAAGGCGGTGAGGCGCACAG  
CGCAGCGGTGTGATGCTAAGAACGGTATCCGTGCACAGCGAGGTGAGAAGCCTTCTGTG  
ACCGGCCAGGCGATGAATGCAGCAATGCGTTGAGCAGCGGTAAAGCGGTGCGATGGCAAAC  
ATGGACGGCAACAGTGTAGGTGGCACTGAAGCAGATCCACAGCAGGGGAGTGGCGTAACC  
GAGAAGGGTGATAAAGGCGTTAAA

>RXN01761-downstream  
TAGCGTGTAACACAATGACCG

>RXN01765-upstream  
GCAGTCCGTCGGTGTGCTTTTCCCTGAACTGCCGGCAGAGCTTCAGCCACAAATCCCAGT  
CAAGGCATAACACCGCACACCAAGAATTTTAGGAGGGGTC

>RXN01765  
ATGAGCAACAACGTAGTGAAATATGAGTGCGCGGTGCGACGCCGACAACATTGTCGCAGTC  
GATATGCATGTGCACTTGGAAAGTCGACAGCTGCGGACACAAATCGATGCCGGCAGACATC  
ATGGCGGCATCCTCGAAGTACTTTAAGACCGCGGAACGAACCTCCCTCAGCAGATGCCATT  
GCTGATATTTATAGGGAACACAAGATGGCGGCGGTGGTTTTACCATCGATGCGCGGACC  
CAAATGGGGCATCTGCCGAACCTGATTTGATGATTGGTGGCAAGCTGTGCCCGCAACAAT  
GACGTGCTGATCCCTTTTGGCAGTGTTGGATCCTCGTACCGGCGAGGACGCGCTGGTGAA  
GCTCGCCGACAGGTGGAAGAACTCGGGGTGCGAGGCTTCAAATTCATCCATCGGTTCAA  
GGATTCGACCCATCCGCGCCAGAGTTCTACCCACTGTGGGAATTGCTCGAAAGTTTGGGA  
TTGCCATGCGTGTTCATACCGGACAAAACGGCATGGGTGCGAGGTCTTCCAGGTGGTCGA  
GGCATTAAAGCTGCGCTTCTCCAACCAATGTTGCTTGATGATGTTGCGGCGGACTTCCCG  
AACCTGACCATCATCATGGCGCACCCCTTCTGTTTCTTGGCAGGATGAGGCTAACTCGATT  
GCCACCCACAAGGCCAATGTGTTTATTGATCTTTCCGGCTGGTCCCGAAGTATTTCCCA  
GAGTCTTTGGTCAGACAGTCCCAATAACGTGCTATCCAAGAAGGTGCTGTTTGGCACGGAC  
TTCCCGCTTGATTACCCAGAGAAATGGCTTTCGGCTTTTCGCGAATCTGCCACTGAAGGAT  
GAGGTTTCGTCCGGGAATCCTCAAAGACAATGCGGTGAAGGTACTTGGCCTAGCCGCTAGC  
ACTGAGCGCGGATCTCAAGCAGAAAAGGTGCTGCAACATGCG

>RXN01765-downstream  
TGATCCCATTCAAGGTGCTGTTA

>RXN01767-upstream  
ACACCAGCCCTCCACAAGAGCGTCGAAGCAATCTACGCTTCGACGCTCTTTTTTTCACTA  
CCTACTCATCCCCACATAAGAAAAAAGACGACACCACC

>RXN01767  
ATGATTGACCATAAACTGTGGTTTAAACACAGTAACCAACAACGCCTCTGTCCGAGAAGCT  
GCAGGAAAAATGCGACATACCCATCAGAACGCTCAACGAGCAGCTTAACCGTCGAATACTC  
CCTGAAAAGACCGTCATCGCTCTAGCACGCGCTTATGATCTCTCACCTGTTGATGCGCTC  
GTTGCGACCCGACACCTACCGAAGAAGAGGCTGGTAGTCGTGAAGAAGATGCCAGCCCA  
GATTCAGCTGACGACTACCTACCTGGGCACTGAACTCGCACCTTGACTATGGCATTTCTC  
GGAGCTTTTGGCGACATCGCTGAAGAAGTAAACAGCGAAAGAGTTAACCGCGACAACGCC  
ATAGAGCAAATTCGCGCATGGCTCGACGAGCTTCCAGGCAGCCTATTCAACAACCTCCGC  
AGCACTAAAACAGGCTACATCGAACTATTTCGAGACCTATCTCGAT



>RXN01767-downstream  
TAAACCCAACCAGCACACAATA

>RXN01769-upstream  
ATTTTCAACAACCAGGACTAAAACACCTGCTGCTGTTGAGCGCTTCTCACACATCATCCT  
CACAAACCCCGTTGCAGCACCAGCATAAATCTATATTTCGCT

>RXN01769  
GTGACGGGGTTGTTGGGGCGCGCCACATTCACTCTTTTCCCGATTGGTTTCTACTAC  
ACACCCATGACCTCTATTACTACTACCGATACCCCGCTATATACAGCACTGCCCATACC  
CGTATCTCTGATGCGGAATTGTTGACACCAACAACAACCTGTGCACGAGATTCTCGTTTAC  
GGACCGGCTGAGTGCCCGGGTGTACAGCAACGCTTGACTTCTTGCACGCAAAAACATG  
CCGGCCACCAAAGTCACTGTAGCTGCCGGTGTAGTACACATACCTACATCACCCAAGAC  
TTAGGTTATCTCCAAGCACCGATTGTCACTGTCCGTATCAGTTCTCTGCTTCTAACCAC  
GACAACGAACACAACACCCAGATCCTGCACTGGTCCGGCGTTAATCGCTACCTCATGCAG  
GCACTCTCCCGTACTCATTTT

>RXN01769-downstream  
TAGAAAGGTTTTTCCCGTCATGT

>RXN01771-upstream  
TGCCCCGCTGTTGGTGGTTCCGGAGCGGCGATAATCGCTAAACGTTTGAGGTGATTGTAT  
GGGTATTTTCAGGTCGCGGTGCGAGGATTTTGGGTGGAGC

>RXN01771  
ATGCACCAGGCTGGCCAGCTCATCAATGATCCCAGTCAGGGTCTGTGGCGCACTTCTGCC  
CTGCGCTCGCCGGTTGCTCGGGTTGGACATGCCGTGTTGCGCCAGCGTGCCGGTGAGATC  
TCGCGCATGCAAGGTCGTGAGTTTTCTCGCCCTGGGGATCAGTTCCGACAGGTAGATTTG  
CGCAGGCGACTGATTCAAGTCCATCCCCAATCAATTCTACAGCGGATGCGATGGCCGTA  
ACCATCACCATGGCGCTCACCGCTGCCACGATTGATCCGGTGAAGTTCGTGCGCGGATTCA  
CAGAACCCGGATGAAGAGATTTATTTGGCAGCTCAGATCGCATTTGCGGGAAATGGTTATC  
GCTATGCCCTTTGGAGGATTTTCATCGGGGTGCGCATTGATCTAGAGCCTGTTTTGGTGGCT  
GCTCAAGCTGCTGCGAAGAATGTGGGCGTGGAAGTCTCGTCAATCTTGCTGAAGGATCTG  
AATCTTCCCCAGGAGTACTCGGGAGCGTTGCAGGAATCGATCGTTGCGAAAATTCAAGCC  
GAAACTGATCTGGAACGTGCACGAAATGAAGTGAAACTACCCGTGCTCGACTTGCCAGC  
GCGAAAGTGTGGAGCAAAATCCGATTCTTGCCAAAATTCGGATGATTGAAGCGCTCCCA  
CCGGATCCACAATTGAGGTTCCGGAGGGTGACTCAAAGGCA

>RXN01771-downstream  
TAAAGTTGCCCATTTCCGGTGCCC

>RXN01774-upstream  
CTGCGCAAGAAGAGAAAAACAACGACAGCGAAGCTGCGTTCGGGCGAATCGGCGATAAT  
CACACACCACTCTTCTGAGAGAATCCTGAGGTCATCACC

>RXN01774  
ATGTCACCGAACTTCCAAGCTCGCGGTACTACTGCGCCCACTGTTGCTTTGTCCATGCGC  
CAGATCGCGCACATCCGTGAAGAAATTAAGAAATCACCACTCGCTGCTTCCGTTTTTCATC  
ACACCCACCACCAAAACAATGGTTGTCCGAGATCTAGAATCACTGTTCCAGCAGCTCTAC  
CACACAGATCTACCTGAACCATCCATCAAAGACAGTGGTCTTATCAGTGCTATCGGCTCT  
AGCGCCGGCAATACCAATAATCCAGCACTCGCCCTAGAACTCAGATGGCTTACCACCTG  
GTGCTTGCTATGCACCACACCGATGTTGCTACCTGGCACAAGGTGGTGACCAAAAACATC  
ACCGAATCTGCTGCTGCACAAGATGCTGCGGTGAGCACAGTGCTAAATACGATGCTGTG  
TACGATGCCGCACAACCTATGGGCATCACTGTTGAGGAAGGTAATGTCGGTAGCATCGCT  
ATTGCCCTTTAGCACAGCAGTGCAGACGGTAAATCTGATTGGTGTGTTTCCGGCATCAGC  
CGCTACATCGAGGTCACCGAAGCCTTGATGCTGCGCGAGCTGTCATAAAAATACTGAT  
GCGCTCAATAAACTGCTCTACCAGACGTGCAGCCGGCGCCGGTTGTGCATTACGACAG  
TTCATGAACAAGTCCGCACACGATCATGGGGTTAATACTGCGGAAAAAGATCAACCAACC

CTGTTT

>RXN01774-downstream  
TAAAAGACTGTCCATTTAACAAC

>RXN01787-upstream  
CAGAAGCACGTATTTTCTTCTTAACTCGCACCTCATCTGGTGTGGGTTTTTTTTGCATTTT  
TTACACACCCCACTCCACACACACTCGCAAAGGATTCATC

>RXN01787  
ATGAGCAACAATGCTCTTTTAGTAGCAAACGAAGCCGACATCGGTCTCTACCTCCACTGG  
AATGGTGGTCGCGACTCGATTGAGGCGTTTCTCGCCTACGCCGCATACGCGCAGTTACCA  
CCCATCAACGAAAATAACGATTGGTTGCCACCGTTTATTACTGTGCTGAAGAACTTCTTC  
GGCAATGATGGTCTTGGCGTCTACCTCGAACCTGTCAATCAGGATTATCTCGACGGCATC  
GACTATGACAACGGTGTTTACATGCTTGACGATTATGAGATCACTGAGCGTATTAATCCA  
CCCGCTGTTGAGCAAGACTCCCACGATCTCCACGACATGTTGATCAAAAATTGATAAAGCT  
CAACCACCTGTCGATCAACTCGGGAGTTTTCTCCATGGCCTAGAGACCTCTGTGCGAGAT  
TTGGGGGTGGTGATCGCGTATTTTTGCCACGTTTTAGCACCTTTGATAAGAACTCGGT  
CGTACCGCATCCACACTGTTCTCGGATTGCTGAGAACGATCCGTTTAACCCTATGACC  
AGCAGCGAGCGATTTAAAGGTAAGCCCTATGTCGATATGTTTCGACAATCAAGACAACGCC  
TTTAACCCAAATTCCTATATCACTACAGATACCGTGCGCATCGTTGTGATCCTGTACCG  
GAAACTAATCCCGACGATGAGAAAGCAGGACGC

>RXN01787-downstream  
TAGCCATGTCTCGCAGCTACCCC

>RXN01796-upstream  
ATGTAACTCGATCAGGTGGAAATGCCCGCAAAAGTGGCGGCGGTGGCCGAGGGATGGCCG  
TTGGTGGCGCATCGGTGGCCTGCTACTAGTCGGGCTCTTC

>RXN01796  
TTGCTCCTTGGCGGTAAACCCTGCCGAGATCGACCAGGTTTTAGGTGGCGATCAAACCCAG  
ATCGAGTCTGGAGAGTCCACCGGAGCCGGCGACTTTGATCACTGCCAAACCGGCGCAGAT  
GCCAACGCCAGTGATGATTGTGCGCTTTACTACACCTCATTTCTCCGTCAATGAAATGTGG  
CAGACTTTGCTTCCAGCTCAGGCTGGTATCGAATAACCGAGCCGACATTGACTCTTTTC  
AAAACTCCACCCAAACCGGCTGCGGTTTTCGCTTCTGCGTCCACTGGGCCGTTTTACTGT  
CCGTACAGACCAAGATGCTTATTTTGACTTGACTTTCTTCGATCAGATGCGTCAGTTCGGT  
GCAGAAAACGCCCCGCTTGCCCAGATGTACATCGTGCGCACGAGTACGGCCACCACGTC  
CAAAACCTCGAGGGCACACTCGGACTGTCCAATTACAACGATCCGGGCGCTGATTCCAAC  
GCCGTCAAGATCGAGTTGACGGCCGATTGCTACGCAGGCATTTGGGCTAATCACTCCAGC  
GAAGCGCTGGCACCCCAAACCTCAGGAAACCGGAATCTGAGCTAGATTCCGCTCTCCTT  
GCTGCAAGCGCGGTGGGCGACGACAATATCCAGCAACGATCCGGTGGCGATGTCAATCCT  
GAAAGCTGGACTCACGGCTCATCGCAGCAGCGCAAAGACGCGTTTCCTCGCCGGCTACAAC  
ACCGGCCAGATGAGCGCTGCGACTTCTCGGCCGGGGCGTCTACAACGACGCT

>RXN01796-downstream  
TAAAGCATTGCTTTTTCGACGTCT

>RXN01803-upstream  
CTAGCGGAAAGGCTTTAGCGACAAGGCTTTTTGCATGTTTTAATGCAGGGAATATTAAC  
TTTTGTTAATCTCTGACCATTGACCTTGACGCTTAAAAC

>RXN01803  
ATGCGAAAGAAAAAGACGGTCAAAATCTCCCAGACTTCCGGAAAAATCCGCCAAAGCTG  
GATAAAAAGGCTTATGAAAAAGAACTAAAAAGACTTCAAGCCGAACCTCGTCGATTTGCAA  
CAATGGGTGTGGAAACCGGTGCGCGCGTGGTCATCGTCATGGAAGGCCGCGACGCCGCT  
GGTAAAGGTTCTGCGATCAAGCGCATTACGCAGTACCTCAACCCCCGGTCCGCAAGGATC  
GAAGCGCTGCCACCCCAAACCTCAGGAAAAAGGGCAGTGGTATTTCCAGCGCTACATC  
GAAAAATTGCCGACTGCTGGTGAGATCGTTATCTTTGACCGCTCCTGGTACAACCGTGCA

GGAGTCGAGCGCGTCATGGGATTTTGCACCTCCCAGGAGTACCGCCGATTCCTTACCAG  
GCACCAATCTTTGAACGCCGTGTTGGTGGAAGATGGCATTACCTGCGTAAATACTGGTTC  
TCTGTATCTGATGAAGAGCAGATTGAGCGTTTTCGAAGACCGCCTGAGCGATCCGCTGCGC  
CGGTGGAAGTTGTGCGCAATGGATTTACAATCGATCACCCGCTGGGAAGATTACTCACGC  
GCAAAAGATGAGATGTTTCATCCACACGGACATCCCGTCAGCACCGTGGTACACGGTGGAA  
TCTGAGGACAAGAAGCGTTCCCGCATCAACGTCATTTTCGCATCTGCTCTCGACGATTCCCT  
TATGAGAAGATCGATCGTCCATTGCGCGAAATCCCTCATCGCCCAGATTCTGAATCTGAT  
TATGTACGTCCCCCTCGCGATGAGTTCGGTTATGTTCCAGATGTGGCAGCACACTTGGAA  
GAAGAGCGCATCAAGAAAGAAGAAAAAGCCAAGAAGGCAAGAAGCCAGCTAAGGCTGCA  
GGAAAGAACTCGGATAAGCAGAAGTCTTCCGGAGGAAAAGGCAAGAAGAAGTCCAAGAAA

>RXN01803-downstream  
TAGAACGCCCTTTTAAGGGGTGA

>RXN01809-upstream  
ACAACACGACAGTTGTAAC TAGTGGTTTCAACACCATTATCGGTATGACTCGTGGCGACT  
CGTATCTCTCTGATGATCTCGATGACCTGGGTAAACCCG

>RXN01809  
ATGAACGAGCAGGAACGAGAAGCCTTAGAGGATGCTGCCCTTGAGGAAGCTGCCTTAGCC  
GATGAATTAGCTGCATTAGAGGCTGAAGCTGGCGTACAAGGGTCAGTCGAGCCTTATGAC  
TATGCAGCAGACCTTGATGATGAGGACGAGTTTGATGAGGACCTTTTGTCTCAGGATGAA  
CCCCGTGACGCTGGTCCGCTAGGTGAGTTGAGCAGTGATAACCATGTCTCTGAGGCTGTT  
GCTGAAGACACTGGGACAAGTACAGAAGAGTCTGCACAAGAGGGCAGTCACGAAGAGTCG  
GTAGACAATCCCCGTGATTTACCGGCACTGCGACAGCGGTGCGATCTTTTCGACCCAGA  
CTTCCCGTACCCAATGCACTGCGACCAGGACCACCCATCCGAACACAACCGGCAGTGAAC  
ACCGACATAGATGATGGCGGGCAAGAGAATACAGCTGGCGCGACTGCCGCAGATGTGGGG  
GCGGGAGTGTTTTTTGGTACGCATTTTGAGCTGGCTTTTGGGCAGGTTGATGTTTACCGC  
CACATAAGGCATGAGCAGGCTATGCGAGATGGACACCAGGATCTCAGCGTCTTTGTCTGGT  
GCTGATGGGGCGATCATGCTGGAAGAACTTAAAAATCGTTACCAGCGCCACCGGAGAAC  
GAGCCCCATGATGATGATGTCACCGAAATGATAAAGACCACCGAGGAAACAGAGAAGGAG  
AACGTAGAGATGGATCAGGATATAGCTGTAGTAGACAACGTTGATGAACAGGTTGTGGTG  
ACACCTGCTCATGACGCTGACAGCGTAGCGGTTGTTGCTGAACAGGTCGTTGCGTCAGAA  
CCAACGCCAGAGCCGTTACCCAAGGTTGAGCACGTAGAGATGAGTGTGATCTAGCGGGT  
GAGACTATTACACCGATTGATCAGGCAATTCTGGTCTTTTATGCAGCTCAACGGTATTGAG  
CACAGCGTGGTGTGCGACGCTTGGGGCTGATGACTCAGGTGGCACATAATAAGGAACTT  
GATGAGGTCTACGCTAAGGCACTTGCCGAGGGTGAATCCCATGCTCAGCAGCAGCATGAA  
TTAGAAGCAGAAAATGAACGGCTTAAAAAAGAAGTTGATGCGCTCGCTGCAGAGCTTAGT  
GCTGCGTTGATGGGCGAGGGTGGTGGTGATCATGAC

>RXN01809-downstream  
TAAGGCCGTGACACCAATTGTGG

>RXN01811-upstream  
GAAGGAGAAGAGACATTGTCTCAAGAAGAGCTGACATTAGTCGCATTGAATTCTTATGAA  
AAAGGAGAGTTGCCAAAGAAGAATATCATTATTTGAAAAC

>RXN01811  
GTGTTTGAAGTTGATGATACCTTGCCAAAAGATATACAAGTAGACCGTACGTCCATGCAA  
GTATTCGAAGCTTTCAGAAACCGTCAAGAAGCGATAAAAGCTTCGATTGAACAAGGACAT  
ACTCGCTATCCGTTATCTTAGAATCAAAAAGACAATGTTTTAGGTTATGTCACCTTGCCA  
GATTTGATCAAGCAATCTTATAAAGATGACCAGCTGACAGTAGAACAGTTGATTGAAGAG  
CCGATCGTAACAACCTGAAACGATCCCTATAAAAAAATTATTGACGATCATGCGAAAAAAG  
GGAAAGCATATTGCTATCTTAAAGATGAATACGGAGGGACAAGCGGCTTAGTGACGATT  
GAAGATATTTTAGAAGAAATCGTCGGGGAAATCCGAGATGAGACAGATTTGGACGAAGCA  
TTGATAGCGGAACAGTCAGATGGCTCTTATATCATCTCCGGCAAACCTAACATTAGATGAT  
TTCCAGCGTTATTTTCATGTAGAGATTCCAGAGTTTGAAGAAACGAATTTTACTACACTT  
GCGGGCTTTGCTTCTAGCCGATATAAAGAAATAAAGCAGGAACAATCATTGAGATTGCA  
TCATTCCGTTTACGGTATTAGAATACCAGCATGCACATATCGATTATTTCAAAGTAGAG

TCCACGGAAAGAAAAACAGAA

>RXN01811-downstream

TAAAAGAAAAAAGGCTGTGACAT

>RXN01813-upstream

GCGAGAATTCAAGAAAAACAAAACAGATCAAAGTAAGGCAACAAGTGAGCAACAAAGTTCA  
GAATCCGAACCAAGGTGGAAGCAAGAACTTCCTCTGGGCA

>RXN01813

ATGGTGGCGATCGTCGTCGTTGCAATCGTCGTCGTCGGCTTCATCGTCATCCAAGGCCAG  
GGCTCAAAAAGCAGCCAAGCTTGGTGACCGCGACTACGAAGACACCTCTTTGGCAATGGAA  
GTAGGCTCCGACTCCATCAGCTGACCTCCGCAAACACCTCCGCCGACGCAAAGTCCGTG  
CAGCTTTTGAAGACTTCTCCTGCTCTCACTGCTCCGAGCTCTCCCTCGCCACCGACGCT  
GACATGAAGACTCAGATCGAAGACGGCAACCTGGTCGTCGAAATCAAGCCACTGAACCTTC  
CTTGACCGCGAAAAACATCGACGGCCACTCCACCCACGCATTGGCAGCAGCCCTTGCAAGTG  
GCAGACTCCAACGACGCAACCTCTACTGGAACCTCCGCGCATTCCTCATGGAAGATCAG  
TCCGAGATCTACAACAGTGGTCCGATGATGACTTCGCAGACGGCGTTGAAGCCCTTGGC  
GCAGACTCCTCCGTAGTAGACGCAATCCGAAACGGCGACAACATCCAGCGCGCATACGAC  
CTGGCAACCGCAAACGGTGAAGAACTCACTGAAGAAACCGGCAGCCTGTCTCACCACGC  
GTCTCTCCAGGACGGCAAGGATGTTGAAGGCAACATCTCCGACTGGATCACCCTGTCTTA  
GCTTCT

>RXN01813-downstream

TAAAGAACTGATCTAGAAGGAAA

>RXN01815-upstream

GAATGAAAAGAAAGTGGTGGCCGATGCTTGGCTATCTCAGCCTGACTTTTACACTTGGATA  
TTCTGCTGTTTTCTCGGGATGCGGCTCTAGAATTGTAGA

>RXN01815

ATGAATCGTTCAACAATTTCCCCAGTTGAAGCCCGCCAGCAATTCCGCGCAGGCCTTATC  
CAACCCACCTCCGGCTGGTCCGCGGGTTTTGCCCAAGCCAACCTCATTTCCATGCCCCAG  
GATCTGGCTTATGATTTCTGCTTTTTGCTCAACGCAACCCCAAGCCCTGCCCCATCTTG  
GAAGTATTAAATGCTGGCGAAACCTTCGGCGGAATTTTCGGCTCAAACGCCACCGAAGCA  
GACATCCGCACCGACGCGCCCCAATACCGCATTTACGCACACGGCGAACTTATCGATTCC  
CCCGCCAGCGCCGTCGATTATTGGCGCGACGACCTCGTCAGTTTCATCATCGGCTGCTCC  
TTTACTTTTGAACATCCCATGGTCCAAGCAGGCGTTCCCGTCCGCCACCTCGAGGCCGGC  
CGCAACGTCCTCATGTATGAACCTCACTTGCCCTGCCGACCAGCCGGTTCCCTATCAGGA  
AACCTCGTGGTGTCACTGCGCATGATCCCCGCATCCCAAGTCGCGGATGCCGTCCGCATT  
ACCTCCCGCTACCCCGCGGTTACGCGAGCACCAGTCCACATCGGCGATCCTTCACTGATC  
GGAATCGATGACATCAACAACCTGATTTCCGCGATGCCCCGCTGTCCGAACCAAGCGAC  
GTCCCCGTGTTTTGGGCCGTGCGGAGTTACCCCTCAAGCAATGGTCATGTCTCCAAGCCA  
CCGCTGGCGATCACTACGCACCCGGACACATGCTGATCACCAGCGCCCCAGATCTGGGA  
TTCCAGGTTCCCT

>RXN01815-downstream

TAAACCTGGATCCACCGATGTGA

>RXN01825-upstream

GTCAAGGTAGCTGGCCCGGCAACTGATACGTTAAGCTCAAACAAGATAAGTACCAGTTGC  
TGGGGTTTTTCCAAGACAATAAATTATGAAGGTGTGAACA

>RXN01825

ATGCCAAAGGCAAGAGTAACTAAAAACGAGACCGCACCGGTTTCAAGCAACCCAAGCGCA  
AACCGCACCCCGTTAAGATCAATTCCGCCGGAACCCCAATGTGGTACAAGGTCATCATG  
TTTGCCCTTCATGATCGTCGGCCTAGCCTGGTTGATCATTAACCTACCTCGTGGGCCCCACAG  
ATCCCATTCATGGCTGATCTTGGTGCATGGAACATATGGCATCGGCTTCGGTCTGATGATC

ATCGGCCTACTCATGACCATGGGTTGGCGT

>RXN01825-downstream  
TAATCCTTCAAAAAAGTGA CTGC

>RXN01831-upstream  
CCTGTGGATAATTGGTTGTTGGCTGATGGTGTGTCATTACGGTGGGTCATTCCAATATC  
GAAGTTCGTATTGTTAGTCCCTAGAGGGAGAGGTTGATCA

>RXN01831  
ATGGATTCTCTGGTCCTTCTTGGGCTTCGCATCGCTTTGCTTGTGGTGTGTTGGTTTTTTC  
GTCTTGATGGCGCTGCGCGCTATGAGGGCAGATTTGAAAGTGACGGGTCAAGCGTCGACA  
AGCAGCTCCTCCGTCGCGGCACCGCAGGGCCTTGCCCGGGCTTTTAATCGCTCCAGCCCCG  
CCTCGTCTTTTGACGGTGGTTCGAGGGCCCGTTGGCGGGCTCCTCGATTGAGGTGTGCGAG  
GATATGACGATGGGCCCTAGCCCTGAGTGCACGTTTGTGGTGGGCGATGATTACGCCCTCC  
GGCATGCATGCGCGGGTGTTTAAGCGTGGTTTCGGAGTGGTTTGTGGAGGATCTGGATTTCG  
CGCAACGGCACTTTTGTGCGGTGGTACGCGCATTGATCAGCCTGAGCAGATTGCGGTGGGC  
ACGGATATCCGTATTGGTTCGTACAGCAGTGAGGCTTGTTCCC

>RXN01831-downstream  
TGATGTTGAAACTTAAATATGCG

RXN01834-upstream  
ACTAAGAACGTGAGCTTGGTTTCATAATACCCCCAGGGTATTGTTAGCCAGGTGATTCT  
AGCCCTTCTTGGCGGCCTAATAATAGGCCTACTTCTTGGC

>RXN01834  
ATGCTCGGTGGTGGCGGTGCCATCCTTGCCATTCCGCTGCTTATTTATGGATTTTCTTTT  
AGCGCCACGCAAGCTACTGCAGCTTCATTAATCATCATCGGACTTGGCGCCCTCATTGGA  
CTGATCAGCCAATACGCTGCCGGGCACGTCCGCCCTTAAAGAGGGTCTAAGCTTTGGCCTT  
TTAGGGTTGGTCCGCTCATTTGTGGGCAGTACCTTGCTAGCAATATCCCGATTCCCTA  
CTCCTGAGCGGCTTTGCCATCCTCACGCTCGTGGTGGCGTTGACCATGATTTCTAAATTA  
AGAAGCACCCGAGAATACATAACCAGAAGGCCAAGCATCCTTGCCATTGCTCTTAGTGCC  
ACCGGCGTGGGATTTTGTACGGGATTTTTTGGTGTGGGTGGCGGTTTGGCCATTGTGCCA  
GCCTTGATTTTTCGCTCGGTTTTTCCATGCGGCAGGCTAGCGCCACTTCCCTAGTGGTG  
ATCGCCGTAAACAGCGCTATTGCCATGGGATTTAGATATTCCGATTGGCAAGTATTGAC  
TGGTCAGTGATCTCGCCAATTATCATCACCACCGTATTGGGCGCTTTTAGTGGCGTAAAA  
CTAGCCAAAAAGGTCAAAGCATCATCACTGCAACTAGGTTTGTGCTGGCTTCTTGATCTTC  
ATTTTCGATCTATATGGGATTTTCAGAATTTCCCGGACCTTTTT

>RXN01834-downstream  
TAAAACTTCAAAATATACCCCC

>RXN01846-upstream  
GTATTTAGGAATTGAAACCCACTAAAAACAGACTAAGTTACTAGGTGATAACAAAAGTT  
GTTTATTACTTATGGGAATAGTGTGGAAGTAGGGTGAAT

>RXN01846  
ATGTCAATTCCCTGGAAATGTTAGTTATGTTGCACAGGGTGGCACCGGTTGGGATGGTGTCT  
GATCAGTACACCACGGGTGAGAGTTGGGATCTACAGTCGTTCCCTGAAAACCTCGACTGAC  
TACCTCATGATTATTGGTGGTTCGCTGCTGGCACTTGTGGTGGTGTCTGTGATTGTTGG  
GGCTTTGTCAACGTGATGCGCAAGCTCTTCGGTGGTCAGAGTGGTCAGCAGATTCACTGG  
TTCACCACTATTTTGTCTCATATTGTGCGGTGGTGGCTTGCCCT

>RXN01847-upstream  
GACGTGTGATCATAGGTGACAAATATACCTCTCAACTTGGCTTCGACTGCCCTGCCCTCC  
TCGATTTAAGAGGCAAGGCTTTTACAGTATCCTCTCATGC

>RXN01847

ATGCTTATTGTGTTGCCCTCCCTCAGAACTAAGACCCACGGCGGTTTCAGGAAAACCTCTG  
GATTTTACCATTTTGAGTTTCCCGTCGCTCACCAAGGCACGCCAAACAATACTCGCTGAC  
CTGCAAGCTTTGGAGGTAGATGAGGCGCTGAAAGTTTGGGCATTTCTGAAAAGCTCCGC  
CCTGAGGCCGAATCCAATCGCGCGCTGGAGACCAGCCCTACGATGCCGTGCGATTTTTCGG  
TATTCGGAGTGCTTTATGATGCGCTCGACGCTGCAACGCTGCCGGAGAAAGCACTGGAA  
CGCCTCGCCATCGGCTCGGCACTTTTCGGCGTCATCCACGCCACCGATCCGATCCCGCAT  
TACCGCTGTCCGGCGGCACAAAACCTGCCACCAAAAAGCGGCGAGCTGCCACCATGAAG  
GCGCGTTGGGGCACAAGCATCAGCGAAGCGCTTATCGACGTCAACCAGCTGGTGATTGAT  
CTTCGCAGCGGGACCTACCAACAGTTGGGTCCGCTAAAAGACGCCGTACGGTACGCGTG  
GAATCAGTCATGGAGGATGGCTCCCGCAAAGTAGTCAGCCACTTTAACAACACTACAAA  
GGTGAACTCGCGCGCTGCTCGCGCTCTCTGAAAAAGAAGCACACACCGCAGAGGACGTA  
ATGAGCATTGCGCAGGCTGCGGGCCTTGTGGTGGAGGAAAACCCCAACCACAAGGAAACC  
CTCACTCTGGTTGTC

>RXN01847-downstream

TAGGCGTTAATCACCATTTTGAT

>RXN01874-upstream

AGTGTCGGCGCGACGATTGTGGGCGGTGCTTTGGCGTGGCACGCAGCAGTTTGGCATCAC  
AGTTCCGGAGCGCAAAACGCGGTACGCCTTTTCGCGTCGCA

>RXN01874

GTGATCGCGTATGTTGCCAGCGGTGCTGCCTGCCGTTTGGCGCATTTGCCGGAGCGTTG  
TTGTCCAAGGAGCTGTCCGGACATCTCCAGGAACGAGTCCTTCTCACCCACACGGTGATT  
AATTTTCTAGGTTTTCGTGGGATTTGCTGCGCTCGGTCGCTGTCCGGTGTGTTCCGCCGG  
ATTTGGCGCACCAAAATTCGCCACAATTTACCCCGTGGTCTGTGGGGATCATGGCGGTG  
AGCCTGCCGATCATCGTCACGGGCATCTGCTCAACAACGGCTATGTCCCGCCACAGGC  
CTGGCCGCGTACGTGGCAGCATGGTTGCTGGCCATGGTGGGGTGGGG

RXN01875-upstream

AATCCTATCCCTAAAAAGTTTCTAACAAAAGTATTGCACTTACTTTTTGATAGTGCTATC  
TTCAGTTGTGTACTTGAAACACACACGAATGGAGCAAGAA

>RXN01875

ATGCGTATTGCAAGTAAGTGGAGCAACGGGATCTTTGGGTGGACATGTTGTGGATAGTCTT  
CTAAACAAGGGCGTCGAGCATCAGACATCGTTGCCATTGTTGAAATGAAGAAAAGGCA  
GCAGACCTCAAAGCCCGTGAATCGCTCTTGGTGTGGCTACTTTTGAAGACGAAGCGGCA  
CTGACTGCAGCTCTTGAAGGTGTGGATCGCCTTGTGTTTATCTCTGGCAGCGAAGTGGGG  
CAGCGCGTTGCGCAGCACACCAATGTCATCAATGCCGCTAAAGCAGCTGGCGTGACATTC  
ATTGCATACACCAGCTTGCTCAACCTTGGTACCTCAAAGCTTGCACTTGCTCCAGAGCAC  
ATTGCAACGGAAGCTCCTGGCAGAAAGCGGCATTGACCACGCGCTGCTGCGCAATGGT  
TGGTACTGGGAGAACTACGAATCTTCAATTGGCGCAGCGAAGGCCACCGGAAGGTATTC  
GGCGCAGCTGAAGGCGCAGCGTTTCCCGCAGCCGCACGTAAGGACTACGCAGAGGCAGCT  
GCTGTTGTATCACCAGCGACAACCAGGCAGGCAAGGTCTATGAGCTCGCAGGCGCACCA  
GCTTTGACCTACCCAGAGATCGCAGCTGGCATTGGTGAGGTGATTGGTTCTGAGGCAGAA  
TACGTCAACCTCTCCGTGGAGGAGTACCAAAATGCGCTGGAGCAGGCTGGCGTTCCAGCT  
GAATTTGCAGCACTTCTCGCAGGCATGGATCCCATCATTGCAGAGGGCGCGCTGTACTCC  
GACAGCACCGACCTACAGGATCTCATCGGACGCCCAGCACCTCAATCGTTGAGGCCCTG  
AGCTCA

>RXN01875-downstream

TAACCTGCTACTCACCTAAAATG

RXN01877-upstream

GTACCCGTATTGTACTAATTGTAATTCCCCGGAGAGGGAAGAAGTTTACATGGCGCCCCA  
TCAGAAGTCAGGGATCAACCGGATCAACAGCACCCGCTCG

>RXN01877

GTGCCGTTGCGTTTGGCTACCGGTGGCGTGCTCGCCACCTTGCTTATCGGCGGAGTCACC  
GCTGCAGCTACCAAAAAGGACATCATTGTTGATGTCAACGGCGAGCAGATGTCCCTAGTG  
ACTATGTCCGGCACTGTTGAAGGTGTGCTGGCGCAAGCTGGTGTGGAACCTGGTGACCAG  
GACATTGTTTCCCTTCACTGGATTTCATCCATCAGTGATGAAGACACTGTGACTGTTTCGT  
ACTGCCAAGCAGGTGGCGCTCGTGGTGAAGGTCAAATCCAAAACGTGACCACCACTGCG  
GTTTCCGTGGAGGACCTCCTGCAGGAAGTCGGTGGCATTACCGGTGCTGATGCGGTGGAC  
GCTGATCTTTCAGAGACCATCCCAGAATCTGGTTTGAAGGTGAGTGTACCAAGCCGAAG  
ATTATTTCCATCAATGATGGTGGCAAGGTCACCTTACGTTTCTTTGGCAGCTCAGAACGTA  
CAGGAAGCCCTAGAGCTGCGGGATATTGAGCTGGGTGCTCAGGACCGCATTAATGTGCCT  
CTGGATCAGCAGCTGAAGAACAACGCTGCGATCCAGATCGACCGCGTTGACAACACCGAA  
ATCACTGAAACTGTGTCTTTCGATGCTGAGCCAACCTACGTGGATGATCCAGAAGCTCCA  
GCTGGCGATGAAACTGTGGTCAAGAAGGCGCTCCTGGAACCAAGGAAGTTACTCGCACC  
GTAACAACCGTTAATGGTCAGGAAGAATCTTCCACGGTGATCAATGAAGTTGAAATCACC  
GCAGCAAAGCCAGCAACCATTAGCCGTGGCACCAAACTGTGCTGCAAACTCCGTGTGG  
GATCAGCTGGCACAGTGTGAATCCGGCGGAACTGGGCAATCAACACAGGTAATGGCTTC  
TCCGGCGGCCTACAGTTCCACCCACAGACCTGGCTCGCATACGGTGGTGGAGCTTCTCC  
GGTGACGCTTCCGGTGCAAGCCGTGAACAGCAAATCTCCATCGCAGAAAAGGTTACGGCT  
GCACAAGGTTGGGGAGCATGGCCTGCTTGCACCGCAAGCTTGGGCATCCGA

>RXN01877-downstream

TAGTAGAAATCTGGCATCCAATA

>RXN01879-upstream

CTTTGCGGGCCGCTGATATTGATCCAACGCTTCGTGGCGAAAAGCTTGATGTCACTGACT  
ATGTGCGCCTAGCTGGGGTGTTCAGCAAAAGGATGAGAA

>RXN01879

GTGAAAATTACCGCTAAGGCGTGGGCGAAAACCAACCTGCATTTAGGTGTGGGACCGGCT  
CACGACGATGGATTTACGAGCTCATGACGGTGTTCAAACCATTGATCTGTTTGACACC  
GTCACCTTAACCACCCCTCGATGAGGAGTTGGTGGAGGAGGGGAGCGTCGTCAAGCAATTA  
TCTGTGACCGGTGCCCGTGGCGTGCTGAGGACGCCAGCAATCTTGCGTGGCGCGCTGTG  
GATGCGTTGGTTAAGCGGCGCGCGGAAAAGACGCCGCTGTCTGCAGTTTCGCTGCATATT  
TCCAAGGGGATTCCGGTGGCTGGCGGCATGGCTGGCGGCTCTGCGGATGCGGCTGCGACA  
CTGCGCGCAGTGGATGCCCTGGATTGGGCCTTTTCGGCGAGGACACATTGCTGGAGGTTGCC  
GCGGAGCTCGGCTCAGATGTGCCGTTTTCGCTGCTTGGTGGCACCATGCGCGGTACCGGT  
CGCGGCGAGCAGCTGGTAGATATGTTGACGCGCGGCAAGCTACATTGGGTGGTGGCCGCG  
ATGGCGCATGGCCTGTCCACGCCTGAGGTATTCAAAAAGCATGATGAGCTGAATCCGGAA  
TCGCATATGGATATCAGCGACCTCAGCGCCGCACTTCTCACCGGCAACACCGCCGAGGTG  
GGGAGTGGCTGCACAATGATCTGACCAGCGCCGCACTCAGTTTGCGCCCTGAACTGCGC  
AGCGTCTCCAAGAAGGCATCCGCTCCGGCGCGCATGCAGGAATTGTCTCCGGCTCCGGC  
CCGACCACGGTATTCTTGTGCGAATCGGAGCACAAAGCGCAAGACGTTAAAGAGGCGCTA  
ATCGACGCCGGCCAGGTGTACGCTGCTTACACCGCCACCGGCCCTGCGGCCTCAACCGCC  
GACCAGCGCGGCGCACACATTTTACTGTTTCA

>RXN01879-downstream

TAATAAAGACAAACTTAAGTATC

>RXN01896-upstream

TTATTGGGCAGCTCTTTTGGACCGCAAGTCACCCCCGAGCTGCGCCACAGCATTGCTTA  
TTGGATCCGCGCAACCACATCAAACGCTAGAGTGATTCC

>RXN01896

ATGACGCATGCGATCCTCTTTGACCTCGACGGCACCCCTCGTTGATCACGCTTCCGCCGCC  
CGCGCCGCCCTGCACGCCTGGTCGCCGACCGTGGGCGTCGACACGGATGTTGAGCGCTGG  
ATTGAGCTGGATAAGTGGGGTTTTGCCCCGTTTTGAGCGCGGCGAAACCACGCATTTAGGT  
CAGCGGCGCGACCGCATCAGGGCGTACCTCAACAGAGAGCTTGACGACGCCACCTGCGAT  
GATATTTACTCCGGCTACCTTAAAGCATATGAGCAAACTGGACTGCCTACCCCGATGCC

AAGGGCGTTCTCGATCGCGCGGTAGCCACCGGTGCCCCGTGTGGGAATCCTGACCAATGGC  
GCAGCCCCCATGCAGCAAGACAAGCTTGATCGCACCGGCCTTGGCCTGCCAGAACTCGTC  
ATGTTGGCGGCGTCCACTCTGGATTCTGCGAAGCCTCGCCCCGAAATGTATGCCCCGAGCG  
CTCACCCATTTGGGTGCCCCGAACCGCAACAATTATCGGCGATGATTGGACCAACGATGTC  
GCAGCTCCCCGCGAACTTGGCTGGAATGCTCTCTATTAGATCGTTCGGAACCGATCCA  
CGCGCCGATATCCACTCCCTGGATGAACCTCTTTTAC

>RXN01896-downstream  
TAGGCTGGCCTTTATTGTTTCCG

>RXN01899-upstream  
CCTCGCAGCACTTCGCGCAGGCGAATCCACAGTGGCCGCAACCTTGATCAAAGAACACAT  
CGAAGGCTACTACGAAGAAACCGCTGCCGCCGAGGCCTAA

>RXN01899  
ATGTCCCGCACTCTGTGGGCGGT'TTCAGATCTACACGTCACCTTCGCCCAAAACCAAAAC  
ACCGTTGATGCCCTCATGCCGCAGGACCCCGGCGACTGGCTGATCGTCGCTGGCGATGTA  
GCAGAGAAAATCCCCGATGTGGTACGTACCTTATCCGCGCTGGTCAAACGCTTTGACACC  
GTGATTTGGGTGCCCCGCAACCACGAACCTTCAACCGGAAAACAGACCGCGTCAACGGC  
AAAGCCCCGTACCGAGCATTAGTTCGGACAACCTCCGAGCCATCGGCGTGATCACCCCCGAA  
GATCCCTATCCGATCTTTGGTGGCGTCACCATCTGCCCCACTTTTACACTTTACGATTAC  
TCTTTCCGTCGCCCTCGGCTCACCGCGAAACAAGCCCTCGCCCAAGCAAAAATAAAGCTA  
GACGACGAACCTAGCCATCGCCCCCTACGTAGACATCCCCCGCTGGTGCGCCGAACGAGTC  
ACCTACACAGAAGACCGCCTAAAAGCCACCAAAAGGCCCAAAAGTCCTGGTCAATCACTGG  
CCGCTGGTCATTGAGCCCCACCCACCGCTCTTCCAAAAGACATCGCGCTGTGGTGTGGA  
ACCACCGCCACCAGGATTGGGCGGTACGATTCAACGCTCTCATGGCCATTACGGTCAC  
CTACATATTCTCGCCGAAACCCGCGTTGATGGGGTAAGCCACGTGGAGGTTTCTTTGGGT  
TACCCCTTTGAAAAACACCCACCTCACATGAAGCGTCCGTGGCCGTTTCCGGTCATGCAG  
ATTAAC

>RXN01899-downstream  
TAACTCTGTTGCTTAAATGGGGG

>RXN01902-upstream  
GGCTGGTCCGAAGTGCAAACCTTCAACACCGGCACCTACGGTGACAACCTGGAACCTCCTC  
TTCTTCGGCGACACCCAGCTGTACAACACCCACTCCAACC

>RXN01902  
GTGCAGAAGAAAGTCCAGAAGTGGGCAAAACAACCTGGAACGGCGGCCACCAATCGAAAAC  
CCAGGAACCTCCTTCATCCTCTCCGCGGGTGATCAGGCAAACCACTCCAGCTGGGACGAG  
CACTCCGCATACATCTCCCCAGAAACCTGCGCAACTACCGTCTGGCCGTGAACAATGGA  
AACCACGACCAGTACAACCTACGACGCCTACAACGCGATGTACCCACGCCCTAACAGGTC  
GATGAGAACTACTTCTTCGAGTACAACAATGCACTCTTCTGTCCCTGGACTCCAACGAC  
TACTTGGACATCGACGACGACATCGCATTCTTCGCGACACCGTCGCAGCACACGGTGAC  
GACAAGGACTGGATCGTCCTGACCTACCACCATTCACCTTTCTCCCAGGCCTACCACATG  
GATGACGCTCGCATTAAGTACCAGCGCGAACCGCTCACCCAGTGATCTCTGAACTGAAC  
GTTGACTTGGTTCTCGGTGGACACGACCATCTACACCCGCTCCCACCTGATGAACGGC  
TTCACCCAGTCGATGCAGGCCGGAAGCAGTTGTTCGGTGAAACTCTGAACCTAAGGCC  
GGCGAAGTTGTTTACCTTGCAACCAACTCTTCTCAGGCTCCAAGTTCTACGACTTCTAC  
GACTTCCAGCTCGGCCAGCGTTACGACACCCGACTGGATTTCAGGAAACCGTCGATCAG  
AAGAAGATCCGCACCTACACCGCAGTCTGGAACCAGGACCAGGTTTCAGGACTACACCAAC  
GTTGAACTGACCCCAAGAGCCTGACTGTGACCACTAAGGACGCGAGTCTCCGGCGAGCTG  
GTTGACCAGTTACCCCTGAGCAAGCAGGACCGCGACGAAGAATCTGAAGTCCCAGTTGAA  
GATGACAAGGACGGAGACAACGCGACCGGCTCTCCAACCTTGGTCTAGCTGCTATCTTG  
GCTCCAGTTCTGGCCATCTTCGGTTTCGTCGGTGGACTCTTTGTTGGCGGCGGCTCCCTC  
GCTGAGTTCTTTGCCAACCTCGGCGTGAAGATGCCTTTC

>RXN01902-downstream  
TAATACTGTCTGAGATTCAAGCA



>RXN01908-upstream

TCCACGACATCTGACACAGAAAGAAGATTACCATGTCTAAGAACAAACGCAGCTCACCCG  
CAGTCTGTCTTCCATATTTTCATATCCCAGCACATAACCACT

>RXN01908

ATGCACTCTGACCGCTTTGAGCACCCAGACAACGGCTATGGCTACACCATTTCGTCAGGAC  
ACTGATGCAGAGAACCCGATGACCCATCACGATACGAAAGATGCAGCTCTCTGGGTTCAC  
AACCGACCACGACGCGGAGATACCGTCGCGGATAAGCCAGAAGGCAATGAGATTCTCGAC  
ATCTTTTGCCAAGTTTCATCTGCGGCCAGCACGATAATGATGACAACCCGTTTGAAGTCTGG  
TCCGACGGTGACTCGGATGCATCACTCATCCGCACCAAGGCGTATGTTGCCGAGCACCAC  
CCCGAACTTATATTCGACATCTCTGCGAAAACCATCACGGGTATATCCCAAGGCGATTGG  
CTCGATGTGGTCTGTGTTACTACTGCCGCCACTTTCGCGAACCTTATCCCTGCTGACAGT  
CTTATTGACATCTACCGCCAGTGGGCTTTTGGTGATGTGTGGACAGTGATTCTTGATTCT  
CAGCCAGGTCTCGCAGGTATTTATGCTGACGATCCAGCTGACGCCCTTGCGTACTATCAA  
GAGAATTTTGAAGATGAACCCATCTGGGATCTCTTAAGCCGCCACGACGCTGACAAAGAC  
GCCGACGACTGGCAGCTGCCCTCTGCTGCAGAAAACACGCACTAGCGCGAGGTACTACC  
CCAGTCGTTATCCGTACCCAAAGACATCATCACTAACGCGCGATACCTCATGTCTGATAGT  
GCTGATGACAATCCAGAATACGATCGCGCCTTGGTGAAGTCTAGTGCTTATCTCTTAAGT  
ATCGACCTCGATGATCGCGTTGCTGCAGAGATGACCATTTTAGGTCGCCCTGTGCCTAAA  
GAAGGA

>RXN01908-downstream

TAACCAACACACAGAAAAGAAG

>RXN01909-upstream

TTAATAAGAATTGTTCTGGGAAGTAATATAAAAAGTCCCGAACAAATTAGTGTGAAGGG  
TTTGTATC

>RXN01909

ATGGCTAATTTTTCGAAGCAAGGATAAAGATGGCAATGTCATCAATCCGAACGCGTCTACT  
AAAGGTGTAGATCTTGTGTCAACGTCTACGACAGCGCCAAGCATGTGACCGAAAAGGGT  
AACACTGTCCACTTTGTGGATGTTTCAAGGTAGCGCAAATTCGGATTGACGCTGACGGCACT  
CGTGCGAATGCGAATCTTGCACACAGACTATGCCTCATCTGCATCTTGACACTAAGGAC  
GGTCAGCGCAACACAGGTGTTGCGTATTCTGATGCGCAGATTCAAGCGATGCAGACGGTG  
GCAGCACAGGGGCGCAACCATATGACCCCGCTCTTGAGCAAAGACGGTGAGACAGTTGGT  
TACTCCATGTTGGTCAAGGCTGATGTCATGTTCCCGAAGACCAAGGACGGCAAGTCTCTC  
CCTGCGGTTCATGAACACTAAGTCTCTGCAGCCATCTGGGGTTCCATTTTCGGACGCGATG  
AATATTTCAGCAGCAGCAGTTTATGGCTGTGGCAATGAATCGCCAAGCAGCAGAAGCGCAG  
AAGGTGCACAAGCCCAAGCGACCCAGGCTCAAGCACCACAGGTGGCACCGCAGCCAGTT  
ATGCAGAATCAGCAATTCCAGGCACAGTGCCACAGGGCCAGCAGCCAGCATATGCAGGA  
GCCCCGTCTATGCAGACGCGGTAGCTCATGCAACCGCGCAGCAGCAGGCAGCAGCAGCT  
CAGGCACCGCAGGCACCTGCTGGGAATCCGTTTAAACCAGCCGCCAGCAGTAGCAGCAGCT  
CTGGCACCGCAGACGACGCCGCCAGCAGTAGCAGCAGCTCTGGCACCGCAGACGCAGCAG  
CCGGCAGCACAACCTCAGATGGATAACGAGCCACCGTTT

>RXN01909-downstream

TAAAGGCGCAATACACCACACCC

>RXN01910-upstream

CACCGTTTTAAAGGCGCAATACACCACACCCCAACAACTTTTTGATTGTTGGGGTGTTT  
GTCTCAGATCATGAACAGCACAATGTAGGAGAAGATTGAT

>RXN01910

ATGGCATTTCCGCTTCTAGCGGTTGCTGGCACAGTTGCCCCCGTTGCAGCAGGATGGGCA  
AAAGATAAGTTTCTCAGCAACTCTCAGAATAATCAGCAGGCCCAGAATCAGCAGATGAGT  
TTTGGACAGGTCAACAACAGCGCACAGAATTCTGGATCAGAAAACAGCGGTTTCATGGGT  
CAATACGGCAATCTGGGTGCAGGTTTGGCAGGTGCTGCTACAGGCGCAGGGCTTGCGTAT  
AGCGATTTTGAAGATGGTCAAAGTTTGTCCCTCGAAGGCCCGCAACATGGTCGGCAAAGGG

CTCGCTGGTGCCGGAGCTGGTGTGTTACCAAGCTTGCCAATGATGCAATTCAGGCCGAG  
GGTGGCTCGATGAAGGCTAGTGCTTATTCTGCCATTGCAGGCCGCTTGGGATCGTATCTC  
AAAGACGGCGGTCCGGGTGTGATTAAATCCGCGATGGCCAGCGGTGCAGCCGGTTTTGGT  
GCGGATAAAGTGCACGATAAATTAGCTGAGTCTGGTCATGAGGGGTGGCTGATTCCTTG  
TCGGGCGCTATTCAAGGAGGTGGTCTTGGTTACTCCACGCTTGGCGGTGTCACCTGGTGCT  
GGTATTGGCGGTGCGACGGGCGGTCTCGCAGGACTAGCACAAAACACTACTTTGGTGGTGGC  
GATGACTACAGCAACGCTGGGGCATCTGCATCGGGGTTTAGTGCCAACCAGGTAAATAGT  
GAGATCAGCACCGAGATTCCGCGAGTTTGCGAATCTTGGTCAACCACAGCGATCCGAGCTT  
GAACAATTAGCGCTACCTCAAGAATCACGGTCTGTAGATAAGAGCTACGACCAAGGCTAC  
GAAGCG

>RXN01910-downstream  
TAAGCGCTTTATAACAACCCCGT

>RXN01911-upstream  
AGATGCCGCGAGATCACCGAGTGAGCGTTACTGAGATCACTGAGTCTCGATGGGTAATCCA  
TATAATTGTGAGCGGGATTCTTAGTGCGCTCGCGGTTCTG

>RXN01911  
GTGTTTATTATTGGCGCCGGCTTGCCACTGTTGTACGTGCCGATTTTTGTGACTGTCATC  
GTCATGGTGGTGTATGCGCTATTGCGCTATGAGCAGCGCATGTCAGGCACAGTCTACGAG  
GAAGCAGATCCTGTGCAAAATGGATTACAGTGATCTGGGAGGGCATCAAGTGCGATATTGCC  
TCGGATATTGCAGCCCGAGCAGAAGCGAAAAAAGCGAAAAAGCCAGTTGCGTCAGATGCT  
GTTGCTGTTGGTAACATATCGCGTCCTTGCGTCAGCATATGTTGGTAGAAACCCAGCGA  
CGTTATCACCACAAGCTTGGTCTGAGCTGCATAATGATCCAGCGCAACTAGAGGATTAT  
GGCTCTGGTCTGCGTGACTGTGAGTGTGCGGCATGTGTGGTGGCTCAGAAATTGGGTGTC  
ACGGTGCACGCTCATGGTGTGGTGCAGGCGAGCGCACGTAAAAAAGATCGCGTCATTATT  
GGGCGAGCCGATGGTATTGATGTGGCCGGCTGGTGGAAACCACCGCCAAGAAGCTCGACGT  
AAAACGAGCGCGGCTAAGCAGTTGGAGCGCGATGCACAACGCAAGCGAACCAGCTGAG  
CGCGATAAAGAGATTGAGCGTAAGCGTAAGGCTCAAGAATTTGTAGCGGAGCAGTCAGGG  
AAAGCTGCTGCAGCACAAACGGCGGGCCGAGAAAAAGGCTGCGAAGCAAGCGCGTGTAGAT  
GAACCTGGTGGCGCAGAAACAGGCTGCTCAGGAGCAGAAAACTCACTGTAAGCGGGACAAG  
CAGCGTGCGAAGAAAGCACAAGGGCGCAAAGTTGGTGCCGTTGATAATTCCGCTGTGGAC  
GATGTGTTGGCGTATGCGGAGAAAACCCGAGTATAGCTGGCTGTAGAGATGACGACAGC  
GTTGTGCACGTTGATATGGCAGCGGTGTCCGCGATGTC

>RXN01911-downstream  
TAAATCGCAGGATGATCGAAAAA

>RXN01930-upstream  
CGAAAGAAGCCATAATTTAGAGAGGACAATTCTCTACTATTGGTCAAGGCTCCACCCGG  
TGTCATTCGACATTATTACCGCTCACTCACAATCGATGAA

>RXN01930  
GTGATTTCAACAAATGAGATTGAAAAATATTCACCTCAACTCGTCGGGATATTGAAATAGCG  
CTTGATGAATCTTCCACTAGTGAGCCAAAGAGATTTTCGGAAATTTACACCTTTACCTC  
GCACTTGCCGAAGGTAAAATATCCTTTCCGGAAAGCCCAAGTGAACCTCGAGAACTCTAT  
GACCATTTAATGCACGGCGAGCTAGGTAAAGAAAAATGAATTAGATGGTGAAGATTTTCCGC  
CAAGGACCCGTGGAAATCCGCGATAGTCGGCAAAAAGTGATTCAATTCAGGTTTTCTCCA  
GAATCAGAGATCATCGAAGGAATCAACGCAATTATTAAGCTGGCGCACTCAGAAGAGGAA  
TCCAACCTTGTGGCATCATGATGTCACACTTCATGTTTGAATCAATTCACCCGTTTTAT  
GATGGAAACGGAAGAACTGGGCGCTACCTTCTCGGGATACAATTAAGCAAAATTCTCTCC  
CCTGCTACAGCACTGACAATGTCTTCGGCAATTAATCAATTTCGAAACAAGTACTACAAA  
GCGTTTCATGCCGTAGAACACCGATTAAATCGCGGAGACGGAACACCGTTTGTTATTTCC  
ATGCTTGAGCTGTTAATTGCAGCGCAAGAAGGTCTCATTTGAGAATATAAAACAAAGAATC  
GACTTTTTGGCAAGCCTTGAGGACGCCATTAAACGCTTCGGGGTACCAATTCCTTTAAG  
AACCATCAGATCAATCTGTTGTACATTCTCGGCCAGATTTCAGCTTTTCGGTAAGGACGAA  
ACACTTTCACTTTGAATCGGCAGCAAAAGTTTCTTAAAGTTTCTAAGGCAACTGCAACGAGG  
TATTTTAGAACTCTCCGAGAAATGGAATTGATTTCACGAGGTGAGCAACGCCCTTTGCGG  
TTTGCGCTCACGGATAAAGGTGCTGAGATAGTAGGTCTTGAGGTAAAAATT

>RXN01930-downstream  
TGACTCCATAACGAGAACTTAAT

>RXN01944-upstream  
GCTGATTCTTCTGTACCACATCATCAGATAATACCGCAACCAGTATCAACCCTGCGGAG  
CCGTTTACCTTCGCCTTCAAATATCACCGATGATGTCCAG

>RXN01944  
GTGCGCACGGCAACACTGCATGTTACTTCCAGTGCTGGCGAAGCCGCGACAACCATCAAC  
CTCACCGAGGATGACGGCTCTTTCAATTGGGCTCTGCCTGCAGCGGATCTCACCGGAAAA  
TCCTGGTTTCGAATACACCGTAACCGCCACCGACGGATTCAACAGCGTTACCACCGAGCCG  
GTACGCGTCACCGTCGACGGCGCCAACACCGACCCGCTGCGCCTCAACCTGGAAGAAAAC  
CAATGGGTCACTGGCACCACCGATGTTATCGGTGCTTCAGATGTCTTCGGCGACAAGCTT  
GAATTGCTTATCGACGACGCGCCTGCAGTCACCAACTCCAGCCTGTCTGCGGCCCGACG  
TTTGCGATGGAAGTAACCCAAACTGATGTGTTCTTCCGCAACGGCATCCTTGCCGGTGGG  
GAAGAACTCCGCATTTTCGATCAAGGAACCTACGCCAACCCGAAACCATCTCCACACCA  
GTCCCGCTGTATCACATCAATGAGGACGGTACCCTCACAGTCAGTGTGTATGCGGGAAC  
AAAGCAGCACCAGAAATTGACCTCAACGAGAACAATGACGATTTCCAGATCAGAAACCTT  
CGACTAATTCGCTGATGGCCGGACCCTCACCCCTGCCGGAATTTCCGATTCTAATGCG  
TGGCTCAACATGGGAGACAGCGCTGGAAGAACTCGATTTCTTCGATGCCACCTTCGCCCTC  
CCTGAGGATGCTTTCACCGGTGTGGCACACGCATGGGATACCACCCAAAGCACAGATGGA  
GAACACCACATCACCATTTCCCGCGAAGACGGCGGGGAAATCAGCCGCACCATCCGGGT  
GATAATACTGCCCCAGAATCACCCTTCTGGAGTTGAAGAAGGACAAGAAGTGCAGCGGC  
ACCGTAGAAATTGATGCCAGGCAACCGATGCGGGTGCGGGCGTGAAGAGCGTCGAGACG  
CTTCTCGACGGC

>RXN01944-downstream  
TAACGCGTGCAACTTCCACTAAC

>RXN01945-upstream  
AGAAGGACAAGAACTGCGCGGCACCGTAGAAATTGATGCCAGGCAACCGATGCGGGTGC  
GGGCGTGAAGAGCGTCGAGACGCTTCTCGACGGCTAACGC

>RXN01945  
GTGCAACTTCCACTAACACCGGTTCCATCGCTTTGGATAAAGGTGAACACACCTTGGTT  
ATCCGTGCAGAAGATGAAGTAGGAAACCGCACCGAGAAAACCATCACGTTTAGCACTCCG  
GATGAAAACCCCATCAGTGGTGACTACGCTCCAAGCAATGGGGCCACCGTGGGCGTCGGT  
GACGTTAAGTTATCTGCACGAGCAAGTGATCCAAAGTGGCGATACTGTCAAGATGACGTT  
CTGGAAGCCGATTACCAAAAATTAGATAGTGGTCGCGTCCGAATGTCATCAGGAACGGTA  
GAAGATGCCGGAAGTGTCTCGCGCGCCGAGGCGAAAATGTTGGAGAGGGGAGACGTCGAG  
AAGCTATCCAGCCTGGATGGGCTGGGCATGGAAGTTACCTCCGACGCCGCACTGCCGTAC  
CAGCTTTTTTGAAGTCGATGCGGCGGATGCACTCGCGGCCGACACTGAAGTGCCTGAAT  
TGGGCGGGATCCGCCGATGGTCGCGCGCAGGTGATCATGTATGTTTTGATGGCGAGGCG  
TGGGTTGAGGTGGATCGTCACTTGACCGCGATGAGCTGGAAGAGTTTACGCTGCAGGGC  
GTCGTCAATGCCGAAAAATTTGCAATCGGCGGCACCTGTACCGTATTGATTCAGCACTCC  
GAAGGCTTCGCCGCTGCGGATCATTCAACTAGAAATTCGACGTGACCGCAGCGACCCG  
GATGATGTGGCTCGCTCTGAGTACGATTTACCCCTCGCGTGGAATCTGACACCCAGTAC  
TACAACGAGGAATTCCACGAGCACCAAAACCAACATCCATGACTACGTGCTCGCCGAACCG  
GAGAACAAGAATATTAGTTTATGTTCCACACTGGCGATGTTGTGCGACGACTGGGATCAG  
CCCGCGCAGTGGGCCACAGCCAACCCGAATACCAGCGCCTCGACGACGCCGCGCTGCCA  
TATCTGTCTCTTGCCGGAACACGATGTTGGCCACACCAGCAATGACTACACCGAATTC  
AGCCGACACTTCGGCGAACAGCGCTACGTAGACAACCCGTGGTACGGCGAATCCTACCAA  
GACAACCGAGGGCACTACGATCTATTTCTGCGCGCGGAATTGACTTCATTAAACGTAGCG  
ATGGGCTGGGGTCCAGACGACGAAGAAATCGCGTGGATGAACGAGGTCTTGCCCAAGCAT  
CCCGAGCGTGTGGCGATCCTCAACCTCCACGAATTCATGCTCACCACCGCGGACTTGGC  
CCGATCCCGCAGCGCATTCGACGAGGTGCGAGCCACCAACCCAAATGTCAGCATGATC  
ATGTCCGGCCACTACCACGACGATTCACACGACCGACTCCTTTGACGACGATGGTGAT  
GGAGTAGATGACCGCACCGTCACTCTATGCTTTTCGATTACCAAGGCCTACCGGAGGGC

GGACAGGGGTACCTCCGACTTCTCCACTTTGATAACCAAGGCCAAAAGATGATGGTGCGC  
ACCTATTACCACATCCCTGAAGGATTACAACCTCTGATGAACCTCACTGTTGGGGCCTGCA  
GAAGACCCCAACATGTATCAAGAATTCTGAAGTGTCTACGAGCAGCTCGGCATCAAACCA  
GAGGGCCGCACCCTGATCGGCGATTCCCTCAGCGCCGATTTCTTGACCTCCAATGAAATT  
GGAATAGTTGATGAGGTTTCCTTCTGGAACGATCGCTTTCACGAACTGGAAGGACGTAAC  
GAAGGTCGCCACAGTTGGTATGTTCGCTCCGAGGATCCTTTCGGCGGCGTCGAGATTCA  
CCCGTGCAGTCTTTCATTGCCGGGGAAGAGGCTGGCGGGAACGCGCCCGGCACTGGAAGC  
TCCAATGGCGGTTTCATCCACGGATTATGGGGTGCCTTGCAGGAATTCTTGGCGGAGCG  
GCAGCCCTGGCTGGAGCTGCGATCGCATTGTCCCGGAATTTGGGACTATGTGACCAAC  
GCATTCAAGCGA

>RXN01945-downstream  
TAATTATGGATAGGTAAACGCTC

>RXN01960-upstream  
TCCAGATTGATCGTGCCAAACAAAGACTAAGCCACTCTAGCTAAACCAACTTACCCACCC  
CAACACCCCATGAGGCATCTGCTTCATGGGGTGTTCGCT

>RXN01960  
ATGCCGCAACACTTTTCTCAAGAAAACCTACAGAAAGGCCCCCGTCATTATGTCTGCACCG  
CTCACCATTACATGATGTCTGTCCACCAATTCTGAAGCTTAACCTCAAGTGGCTGACCTGC  
ACTGTCTTGAACAGCCCCAAATCTCACCAGAACCTGCATCACGGTTTCTGTGAACCACACC  
GAAGGCATGTCCCTGGTCTCTTTCGAAGGTGGTCACGGGCTCACCGAGATTGCCAACACC  
CAGCTAGTGCCTGTGCTTGAGCTACCAAAGTTCAATCCTTTTGAGGCACCTGCTATCCAC  
CTTGAAGCCGCCAACAAAC

>RXN01960-downstream  
TAAGAAAGCATCCTTCATGACTG

>RXN01985-upstream  
GACGTGAGACATTTCTTCCAATACCTCTCCAGTGATATTCTGTCTGGGCAGCCTAACCTAA  
GTTATTCCGTTGTGTTTCGAGAAAGAGAGAGAACTTTTC

>RXN01985  
ATGCGTACGTCTCGCGTTCTAGCCGGCATTTCTTGCCGCAACCCCTCACGGTGTCCCTCGCG  
GCCTGTCTCCCGAATTTCTCAGAAACGTCTCCAATTCTGCTTTCAGCAGCATCCCAAAGC  
TCTGACGTTTCCAACGAGGCGTTCCCTGTCCACCATGAGCACGCTTTCGGCGAGACCACC  
ATTGAGTCCAAGCCAGAACGCATCGCAACTGTTGGCTGGTCCAACCATGAAGTCCCTCTC  
GCATTGGGTGTGACTCCTGTCCGGCTTTGAGAAGGTACAGTGCGGCGACGATGACAACAAC  
GGCATCTTGCCATGGGTGGAAGAAACCTTGAGCAAGCTCGGCTCCGATGAGCCTGTGCTT  
TTCGATGCCACCGATTCCATTCTTTTGAGGAGATCGCCAACACTGCTCCGGATGTTCATT  
TTGGCGTCTCTACTCTGGCATCACCCAGGAAGACTACGATCAGCTGTCCAGATCGCACCT  
GTGGTTGCCTACCCAGAAATCGCATGGGGCACCTCCCTGGATGAAATGATTGAGATGAAC  
TCTAAGGCGATTGGCTTGGAGCAAGAAGGCAAGGATCTCATCGCAGATCTGGATGCAGAG  
GTTGCTTCCGCCATCGATGCCAACCAGAGTTGAAGGATGCGAAGCCTGTATTTCGCGTTC  
TTCGATGAGAGCGATTCTTCGAGATTGGTGTGTACACCAGCATTGATCCTCGCATGAGC  
TTCTTGCTTGATGCGGGTGTCCAGGAAGCTTCAGTCCCTCAAGGAGCACTCCAGCCAGAT  
AGCTTCTACGAGCAGGTTTCTGCAGAAAACCTGAAACCTTCGACGATGTTGATGTGATC  
ATCACCTACGGCACCGAAGATGATGCTGCAAACGCTGAGCTGTTGTCCAAGATGCAGGCT  
GATCCACTGCTGTCTCGAATCCAGCTATCGCCGAGGGCAAGGTTGTGTTCTTGGGTGCT  
AACCCACTGGCTGCTTCAGCGAATGAATCCCCACTATCTATTCTTGGGGTATCAACGAT  
TACTTTGCAAACTCGCCGAACCTCTGAAG

>RXN01985-downstream  
TAAAACTGCTTGATGTCAACAAC

>RXN01987-upstream  
GGGTAGGAGAGGGGAAATCCCCGATGTGCTCTAGGTTCTTATTGGCGATGATTGAAGAA

GAAAGAAAACTCAATCAGCCATAAAGGAGCTTGATCCCG

>RXN01987

ATGACTTTCCAGCACAAATCTCGACGACTCGCCCCGAAGCACCACCGACAAATGGATCGGC  
GGCGTCGCTGGTGGCCTCGCAGAGACCTACGGTTGGAATCCGGCCTATGTGCGTCTCGCG  
TTCGTGGCGTCGGTCTGTTTCCACTGCCAGGTTACAGATCCTGTTCTACGCCCTAGCG  
TGGCTGATCATCCCATCCCGAGAAAATCGCTTC

>RXN01987-downstream

TAACGTGCGTTGCATAACGCAGA

RXN01988-upstream

TTAAGAATTGGATTTCGAGTCGGTACCGCTTGAAAGTACTTTGCGTAAGTTCACCGACT  
CCCCCTAGTTGTTGCGAATATTTATAGATTGTTGAGAAAG

>RXN01988

ATGAACATGAAGACGCACCCGGCTTCCGCCAAGCAGACCACCGAGCTTCGACTCCTGACA  
GCCACCGTGTAATCAAAGCACTCAATGAAGTCCACAACGTCATGCAGATGATCGACCCA  
CTAACTCCAGTCGTTCCCATCACCACGGGCACCTCAGTTGCCGAGCTTTATGCTGACGCC  
CGCGAGCACCTCGACAAATGGTGCAACCCAGGTGATGATCCCCGTCATTTACCTTCCAAC  
CTGACCTTGTGAGTAGTTGCCCTGGGCAATGAAGAGGTTGACGCACCTGGGCCATTCGGAA  
GGACAAGCAGTTCACCTCCCTTCTGGAAATTCATACCCCGAAGCGCAGCTGGCCTCTTTCC  
GAGCTTTATATTGATGACAATGAGGGTTTGGCTCAGGTGTCGCGCTGCTTCGCCCGCCTT  
GTTGGC

>RXN01988-downstream

TAGTCCCACCCACCAATTGCAT

>RXN01991-upstream

TCCGGAGGTGGATTTGAGGATTTTCGACGTTTTCTCGGAAGTTCCTCGGGTAGAGGAAACA  
TCGACGAGGATCAGCTATTCTTACAAAATTTCATTTGAAT

>RXN01991

ATGACGAATTTGTTGCCGCATTTCCCGAGTACCGACGTAGCTGCGTGGGAAACCAACCGTT  
GTGTATTCAGCGGATAAGACCACAGCAACAGCGACGTTTAAAGAATATTCCTTCGGATATT  
TCCTTTAGTTGGACTGGTATTGAAGCACTAGAGCCATTTAGCCCTGGTAAAACCTTCGAA  
CATAAGGTGCAAGGTTCTGTTGGTGAACCAGCGGGGGCGTTTACATAGGGATAACTATTTT  
ACTGAGGGTGAGCTCTACAAACATCGCCACGCAGACGATCTGCTTTCCGGTGATGGCTTG  
TTTGGCCCCAACATCACCGATGGCGATGGCAACCTCCCCCTCTGTTGATGACGGCAAGGAC  
GGTGACGATGGGTCTGATGGCTCAGACGGCCGAGACGGTGTGTCGCCATTGATGTTGTT  
GACAATGCTGACGGCACGGTGACTGTACCTTGTCCGATGGCACTACGTTTACTCTTGAT  
GCTGGTCAAGACGGCAAGATGGTCTTGACGGGCTTGATGGTACTGGCCTAACGCTGGAA  
TCTGCTACCCCTGATGAGGACGGCAACATCACCTATGTTCTTTCTGACGGTACTGAGTTC  
ACTGTGCGCAACGGTGTGATGGGTCAGACGGTAAGGACGGCAAGATGGAGTCAATGGC  
ACAGATGGCGTAGACGGGTACAGACGGTAAAGGTCTGGTAGAGGTGTCCCGAGTTACCAAC  
GACAACGGCTCAGTGACCATTAACCTACGAGGACGGTTCACAGATCACCACGAAGCCAACG  
CCGACAACTGGCTGTCCAAGCTGCTTGATTTGCTTCTCCCGCTGTTAATCTGTTCCGT  
CTTGGTGGCGGCTCCGTCATTAGTTCCAGTAAG

>RXN01991-downstream

TAGTTTTTTTCACTCCCTGTTTTG

>RXN01996-upstream

CTAGTATAGAACGGAACACGGCAGCGACACAACTGCACAGATGCAAGAGTGTCGGTACC  
GTTAAAAACGAAACACACTTTCACCGAAAAGGACTTCCCA

>RXN01996

ATGAGCAAGTTGACTGGCACCTGGACCCCTCGACCCTGCACACACCGAAATCAAGTTCGTG  
GCTCGCCACGCAATGGTTACCAAGGTTGCGGGTGAATTCACCGAGTACACCGACTCCATT

GTCGTAGATGCTGAAAACCCAGAGAACTCCTCTGCAAAGGTTGTTATCAAGACCGCTTCC  
GTTACCACCGGCAACGCAGACCGCGATGCACACGTTAAGGGCGACGACTTCTTCGCAGTA  
GACAAGTTCCCTGAAATGACTTTTCGAAGCTACTTCTTTGTTATCAAGAACGAAAACGAA  
GGCACCGTTACCGGCGACCTCACAATTCTGTGACACCACCAAGTCCGTCACCCTGGACGTT  
GAGGTTGGTGGCGTTGCTGAGGATCCATTTCGGCAACACCCGCTTGGCTTCGAAGCCTCC  
ACCGAAATCAACCGCAAGGACTTCGGCGTAGATTTCAGGCTCCACTCTCCACCGGTGGC  
GTTCTGGTTTCTGAGAAGATCAAGATCGAGATCGACGGCTCCGCAATCAAGGCTGCT

>RXN01996-downstream  
TAAGCGCCCAACAAACAAAAGCC

RXN02007-upstream  
TGGAAGCCCCAGCCGCGGTCCAAGAGACAGTTGCGCCGACGTCCACCCCTTAGGACGCTG  
ATTACAGACGTGTCCATTTCCTTTACTACTATTGGAAATT

>RXN02007  
ATGAGTTCAGACGCAGAAAAGGCATCCGTGGAGCTTTCGAAAAATTTACCCAGAACGC  
ACCCATATTTTGGGCGCCGTTGTTTTTGGCCTGATCTCATTTAGTCATCGGCGCAGCC  
CCTCAGTACCTGTTTGGCTGCTCGCGCTCCCTGTCTTCGTTACTGGGTCTAAAA  
TCATCCACGATCGTTGATGAACAGGGCATCACCGCAAACTACGCCTTCAAGGGCAAAAAG  
GTTGTGGCCTGGGAAGACCTCGCAGGAATCGGATTCAGGGTGCCCGCACTTTCGCTCGC  
ACCACCTCCGATGCGAGAAGTCAACCCTCCCGGGCGTCACCTTCAACTCCCTTCCCGCCTT  
GAAGCTGCTTCCCACGGCCGCATCCCCGATGCGATCACCGCAAGCAAGGAAGCAGCCGAC  
GGCAAGGTTGTAGTCGTTCAAGAAGACGGCTACTCCGTGATGATGTCCAAGGAAGAGTAC  
TTGGAGCGCCAAAAGGCACCTGGGCAAGCCAGTTTCAGTTGAACCTCGATGACGACACCGAT  
GGGAATACAACACAAACAGAAAGCGTTGAATCCCAAGAGACCGGACAAGCCGCGTCTGAA  
ACCTCACATCGTGATAACCCTGCGTCACAGCAC

>RXN02007-downstream  
TAGAGTGTAATAAGCCGTCCGAA

>RXN02014-upstream  
AGAGGACAACAACATGAGAGCAGACGCACTAAAACGCCGCGAACACATCATAACCACAAC  
CTGCAATCTCTACCGCACACACCATCACGATTCGCTCACC

>RXN02014  
ATGGAAAACATTGCAGAACAGGCAGGAGTGGGTGTTGCAACTTTATACCGAAACTTCCCC  
GATCGCTTCACACTGGACATGGCATGCGCCCAATACCTTTTCAACGTGGTGATCTCCCTC  
CAACTCCAAGCCATCAGCACCTTCCCCACCGACCCAGAAGGCGTGTGGACCTCCTTCAAC  
CAACTACTTTTCGACCGCGGCCCTAGGCTCCCTCGTCCCAGCACTTGCCCCAGAATCCTTA  
GACGACCTCCCCGACGAGGTCTCCGCCCTGCGTCGCACCACAGAGAAAAACACCACAACA  
CTCATCAACCTAGCCAAGCAGCAGGACTCGTACACCACGACATCGCGCCGGGCACCTAC  
ATCGTCCGTTTGATCACCATTTCGCCGCCACCTATCACCGCGCTGGCGACAATTTAGAA  
AACTCCCACAAAGCACTGCTTGGCCTTTATTTGTCCGGTCTTAAACACGGCATGATGGCT  
AACATCGGAGAACATGACGGAAAGTCC

>RXN02014-downstream  
TGATCTAGCAGTTTCCTTTTATAG

>RXN02019  
GAAATTCCTGCTGGCACCAAGGTTGAGGCCTCTGACCTTGGACTTCAGGCAATCCCTACT  
TCCCTACTGCCAGCACCTCCTACGATTCGATTGACGATGTAGTTGGGCTCGTTGCGGCC  
TCCACATTAAGTTCCGGGGAAATAGCCACAAAGCCTCGATTTCGTGGGCACCGAATTGATA  
AACTCCATTGCGACAAACGTCACTGATAGCTCTTTGGTGGAAGAAATTAACATGGTTCCA  
CTCAGTTTGGCTGAACCTTCCGTCATCCCCCTACTGCAGCATGGGGACACCATTTCGGTT  
GTTTCCCAAGACCCAGACACCGGTCTCCAGAGAACATTGCTGCAGGTGGAACAGTAATT  
CTGGCGGGTGGTACAGACCCCTCAACCATCTTGATTGCGCTTCCACAATCAATCGCTGAA  
AAGGTTGCAGCACAATCGCTCAATACCCCTCTGGCGGTAGTCTTGACCGGAGACAGAGCA

GATAATTACACAACCGAAGAA

>RXN02019-downstream  
TAGTTCCTATTCAAAAAAAGG

>RXN02023-upstream  
GATGTGGCAGCAATTTTGAAGCAGTACCTGAGCGAGTAACCGCATTCGGGGTTATCGTGG  
GACTTCCGAAATGTAAGTAGAGACTAGAGGAGGAAACACG

>RXN02023  
ATGGCTCCTAAACAACTCCCAGCCCAGAGAAGAATCGAAACCTGGTGGGACCAGTTCTG  
CAACGTCGGCAGACAGAGGGTACTTTTGATCAACGCTTGCTAGAAATGCGCGCTGATCAC  
AATTGGAAGCAGCCGATCCATGGCGTGACTGCGTATTCAGTCTGAGTTTGTGGCGGGT  
TTTGATGCCCTCCACGAGATGCCAAAGGCCGTAACCGTCTTTGGTTCCGCACGCATTAA  
GAGGATACCCCGTACTACAAGGCGGGTGTAGAACTTGGTGAAAAGCTCGTTGCAGCGGAC  
TACGCAGTTGTACCCGGTGGCGGTCCAGGTCTGATGGAAGCCCCAATAAGGGGGCAAGC  
GAGCCAATGGTTTATCAGTTGGTCTGGGCATTGAGTTGCCACATGAACAGCATCTGAAC  
CCTTATGTGGATTGTGGGTCTGAACTTCCGGTACTTCTTCGCACGCAAGACCATGTTCCTG  
AAATACTCCCAGGCTTTTGTGTGTCTGCCTGGTGGTTTCGGCACGCTCGATGAGCTTTTC  
GAGGTCTCTGCATGGTACAAACCGGCAAGGTACCCAACTTTCCATCGTGCTGATCGGC  
ACTGAGTTCTGGGCAGGTTTGGTGGATTGGATCCGTCACCGCCTGGTAGAGGAAGGCATG  
ATCGATGAGAAGGATGTTGACCGGATGTTGGTCACTGATGACCTGGATCAGGCCGTCAA  
TTCATCGTCGATGCACACGCTGGATTGGACGTAGCGCGTCTCCACAAT

>RXN02023-downstream  
TAAGCAGTGGCTACATTAGGTGT

>RXN02032-upstream  
CTTAAAAAGGGGCTTTATCGGTTTCAGGCGAGCGAGACCTTCGGCGTTACACTTCGCCGG  
GGTCTATTTTTTATGCCAGGCACGGCTCATAGGAGAACC

>RXN02032  
ATGCCCTTTTACAAATCTCTCTGCTTTCCATCGGTGTCGCCGCCGATGCGTTTGCTTGT  
TCCGTTGTCCGCGGCACCGCCATTCAAGTCAACCTTTTCAAACGCGCACTTGTCTCGCG  
GGCATCTTTGGTGTCTTCCAAGCGGCAATGCCTTTAATCGGCTGGTTTATTGGCCGTTTC  
TTTGCTGGAATCACCTTCATCGCTGAAATTGATCACTGGATCGCTTTTGCACTATTGGGT  
ATTGTCCGCACCAAAATGATCTGGGATGCCTTCCAACCTGAAGATGATGAAACCATTGTC  
GATGACGGCCGCTTCAATTTAGACCAGCAATTATCCTGGGGCTAGCCACCAGCATTGAC  
GCATTAGCCGTAGGCATGGGCCTGGCATTCGTGGAAGTTTCCATCCTCAAAGTGGCACTG  
TCCATGGGCAGCATCACCTTCGCACTTTCGCTTGCTGGCGCCTGGATCGGACACCATGGT  
GGAGGAAAGTTTGGCAAGTGGGCTACGATTCTTGGCGGAATAATCTTGATCGGAATCGGC  
GCAAACATCGTCTACGAACACCTCAGCGCG

>RXN02032-downstream  
TAACCCCTCGGCGCATTATCCTCA

>RXN02039  
AAGGCGTCGATAAGCAATTTAAGCTTTTGGACGTCCACCTCCACCACCGCACCCCTTTGG  
CTCGTGGGCACGCTTGTGTGGCTGGCGGTGCAGGCGGTGATGCATGACGGCGAGCTTTAC  
CATGTGGAAGTTCCACGATTGCGCTGGTCATCGGCTTTGGCGCGCAGCTTCTGATCGGT  
GTGATGAGTTATCTACTGCCGTCGACGATGGGTGGCGGCGCGAGCGCGGTGCGGACTGGA  
ACGCACATTTTAAACACTGCGGGGCTGTTTAGGTGGACGCTGATCAACGGTGGCCTGGCG  
ATTTGGCTGCTCACCGACAATTCTGTGGCTGCGCGTCTGTGGTGTCTCTGCTGAGTATCGGA  
GCGTTGGCAGTTTTTGTCAATTCTGCTGCCCCAAGGCTGTGCGGGCGCAGCGCGGAGTGATC  
ACCAAAAAGCGCGAACCAATTACTCCGCCGGAGGAGCCTCGACTCAATCAAATTACCGCG  
GGAATCTCTGTGCTTGCCCTGATTTTGGCAGCATTCGGTGGGCTCAACCCCGGTGTTGCG  
CCGGTGGCAAGCTCAAATGAAGACGTCTATGCTGTGACCATTACCGCAGGTGACATGGTG  
TTTATCCCTGATGTGATTGAAGTGCCTGCTGGTAAATCACTCGAAGTCACGATGCTCAAC  
GAAGACGACATGGTGCACGATCTGAAATTTGCCAACGGTGTGCAAACCGGACGTGTGGCG

CCAGGTGATGAAATTACGGTGACCGTCGGCGATATTTCCGAAGACATGGACGGCTGGTGC  
ACCATCGCTGGGCACCGCGCGCAAGGAATGGATCTGGAAGTAAAGGTTGCGGCTCCGAAT

>RXN02039-downstream  
TAACCAAGGGCTGCTGAAAACT

RXN02044-upstream  
TTACTTTCTTAAGTAATTTAACGAATTTGGTCTCGAAACTGACCTAAAACCCCATGTTGC  
TAGTTGGTGCAAACCAATAATAGCTATAGCCCCAATACAA

>RXN02044  
ATGGTCACCCCAATCATGGGGAATTGGAACCTCTATCCTGGGCATTTACCGTCAGAAAATC  
CAAAATCGACATTTGGTTTCTACGCTTTTATAGGGCATACTTCCCAATCGTGACCGAGCTG  
ATTATTTTATTGATTGTTATCGTGACGGCGCTCGCCTTCGATTTACAAACGGATTCCAC  
GACACCGGCAATGCGATGGCCACATCCATTGCCACAGGCGCTCTAAAACCTAAAGTCGCC  
GTGGCACTATCCGCCCTCACTGAACCTTGTGGCGCATTCCTCTCTGTAGAAGTTGCGACA  
ACTGTTGCCAAAGGCGTTGTTGACCTCGACCAATTCGACCTAAGCAATGCCTGGGATTCC  
CACCAGCTCCTGCTTGTGCTCTTCGCCGGCCTCATTTGGCGCCATCGTCTGGAACCTTCTG  
ACCTGGCTGCTAGGCATTCCTTCCAGCTCCTCTCACGCACTTTTCGGTGGCCTCATTGGC  
GCCGCAATTGCTTCACTCGGTTTTCGGCGGAGTGGTGTGGGAAGGTGTCTTGTCCAAGATG  
ATCATCCAGCATTTGGCTGCACCAAGTTGTTGCAGGTCTCGTGGCCGCCATCGGCACTTTC  
GCCGTGTACAGCATCACAAAGGCAGTTGGAGACAACGAGAAGAACCCTTACTTCCGCTGG  
GGTCAGATCGGCTCCGCTTCCCTTGGTTTCCCTGGCACACGGCACCAACGATGCCCAGAAG  
ACCATGGGCGTTATCTTCCCTTCCCTGGTTGCCACCGGTCACCTGGGAACCTGACGCTGAC  
ATCCCATTCTGGGTCAAGGCTACATGTGCATTGGCAATCGCAATCGGTACCTACTTGGGT  
GGTTGGCGCGTTATCCGCACACTGGGCAAAGGCTTGGTTGAGATTGATTCCCCTCAGGGC  
ATGGCAGCAGAACTTCTTCTGCAGCAATCATTTTGACTTCTTCCCACTTCGGTATGGCA  
CTGTCCACCACCTCACGTTGCTACTGGCTCCATCATGGGTACCGGCATTGGACGTAAAGGG  
GCGAAGGTTTCGTTGGTCCGTCGAGGACGCATGGCAATGGCCTGGGTTATCACCTCCCT  
GCCTCCGCGATCGTTGGCGTTTTCTGCTGGTGGGTAGCTCACGGAATTGGTCTTATCAGC  
TCAGACCTCCTCGGAGTCCCTGCTGCATTTCGCCATTCTGGTCATTCTGTCTGGCTACATT  
TACGCCGTTTCCCGTCCGCTGCTGTTGATCCAAAGCAACGTCAACGCTGACTGGAATGAA  
GAATCAAACAGCGTGGAACCTGCAACACCTTCCGCCCGGCTGCTTCTGAGATTACAGAA  
GCTCCTGCCGCTCCAGCCGCTCAAGCCGTTCAAGATCTCAACAACGAGAATGAGGTAACC  
AAG

>RXN02044-downstream  
TAATGAACCTCGCTACTATTTTC

>RXN02045-upstream  
CACCTTCCGCCCCGGCTGCTTCTGAGATTACAGAAGCTCCTGCCGCTCCAGCCGCTCAAG  
CCGTTCAAGATCTCAACAACGAGAATGAGGTAACCAAGTA

>RXN02045  
ATGAACCTCGCTACTATTTTCGGAAGCATCTTTGAGGTCACCTCGTGGGCATTTTGCTC  
GGCGCAGGCCTTCCAGCCCTTTTTCGATTAGGAATCCGCTTTGCTCACAGCCCTTCTTCC  
AACGGCACCAACGCTCTTGGAATAATGCTTCAACCATCTGCTTTGCCATCATTGCGGTT  
GCTATCATCGCTGGCATTCTCTGGGTCACCAAAGCAACGATCTACCAGTACTCTGGTTTC  
GACATTTTCGGCACTGAAGGC

>RXN02045-downstream  
TAAAAGCACCAGCTGCGAATAAC

>RXN02049-upstream  
TCTACGCAGTCTCCACAGACCACGCAGCTTTAGATGCAGTGTGGCAGTCCCTGGCTTCGCG  
ATCTGGAGTTGCCGGAGTTTCTTCTGGTGGTTTGGACTA

>RXN02049



GTGCGCTATCTGACGCTGGCCACAATCATCGCAGGTCTCTCCGGGTTCGTCGTCATCATC  
ATCGCTGCCTGGGCCCTTGGTGATTCCAGCCAACTTTCCGAAGAATTCACCGCCTACTGG  
GGTCTGTTCTTTGACAGGAACCGGAGTGCTGACTGGGTGACGCAGGAGACGACCCGCGCG  
GTGACGGCCGGTTCCTCGTGGTGGTTCTCGTGGTGGGCGTGCTGGTTCGTTGTTGGATTT  
AGGCCGTTTTTGTFTTAGCTTCGTGGTTGCGGCGATAGTGCTCGTGGTGCTTGGCGCTTCG  
GCGCCGCTGTGGATCGGCCAGCTTTTAAGTAATTTGCAAGGTGTTGGTGTGGGCTACTT  
GCTGTAGGTCTGTAGCTACGCGATCCAAGCGACAATCTCCGGCATTTTTGTCCGGCTG  
CCAATTTGTGGAAAGAGTATGCCTCGCTGATTTCTTTGGACACCGGCGTGCGCATGGTTTT  
AACTGTTGCCGCTGGTGTGCTGGGTATCAATTGCTGGCGTTCTTGATCATCACC GTTGT  
GGGATCAATATCCTGGCTGGTCATCGTGCTGTGCTTCGGTTCGGTGCGTTCCGTTTTGGG  
ATCGGTTGC

>RXN02049-downstream  
TGATGTTTCACGGGGCGTTTTCA

>RXN02050-upstream  
CTACTTGCTGTAGGTCTTGCTAGCTACGCGATCCAAGCGACAATCTCCGGCATTTTTGTG  
CGGCTGCCAATTGTGGAAAGAGTATGCCTCGCTGATTTCT

>RXN02050  
TTGGACACCGGCGTGCGCATGGTTTTAACTGTTGCCGCTGGTGTGCTGGGTATCAATTG  
CTGGCGTTCTTGATCATCACC GTTGTGGGATCAATATCCTGGCTGGTCATCGTGCTGTGC  
TTCGGTTCGGTGCGTTCGTTTTGGGATCGGTGCTGATGTTACGGGGCGTTTTTCATC  
CGACAGGCTCTGCTGCGATGGCAGCATCCGGCGCCACGGCAGTGCTGATTACTGGTTTC  
CCGACCCTGCTGAAAATTCACGAACCCCTCAGCGGTTGCAGGAGGGGTTTCGATGGCCGCT  
GTTTCCTACGCCGTCATCCTGACCCGCGCTCCCTGCTGGTTCGCTGCAGCAATTCCAA  
TCGGCGATCATCGTTCGTTTTGTCAAAGGTACGTCCGGTCCATTGAAAACCTTTGGCGGGT  
CCGTGGCAATTGTGTGGGACGTGGGACTTGTGGAGCTGGTCTTGTCATGGTTAGTTGGC  
CCATGGATCCTGGACGTTGTACTCCAAAAGGAACCTTCGCGGTCCCTGGCTGGCTACTC  
GCGATGCTCACCTTAGGCGCCACCACCACCGCTTCATTGATGGTGTCCGGCTGCGCGGCG  
ATCGCCTTTGAACGTACGGGATCTATCTACCGGATGGGTGTTGCCACTGTTGTTGCC  
GTCGGATTCTTGCTGGGACCTTTTGATTTGGGCGTCGCTGCTGGCCTTGCGCTCATTGTT  
GGCCCACTCTGCGGTTTGCTGGTACACATGGGAGCGTTTGTGGTGGGGATCGGAATCGG  
GTTTTGACTGCGGGA

>RXN02050-downstream  
TAGTTTGGTTTGATTGGGGGATT

>RXN02059-upstream  
TCGGGAAATTCACATCATGAACGCCTAGTCTACGGGAACCATTTACCAGCGTGACGTT  
GTAAATGTGAAC TGAAAAAGTGAAAAGGAAGATGATAAAG

>RXN02059  
ATGACTCAACCACGGCCCGATGCCGCATCTGTGTCGCTGGAAAAGAAGCGCCAGAAAGGA  
TGGCCAGTGGGAAGCTTTGAAACATACCCAGAAGCCCAAGCAGCAGTGGATTTGCTCAGT  
GATAATGCATTTCCCGTACCCGAATTGACCATTGTTGGTGTGGACCTGATTGAAGTGGA  
CGCGTTACAGGTCGTCTACGTGGGGTCGTGTGATTGCCGGAGGAATGGCATCTGGCGCA  
TGGTTGGGTCTGTTCTTTGGCATTGTCATGGCCTTGATGTCTGGATTCTGGTTCTCTTCC  
ATCGCAGCGGGAATAGGTATGGGTTTGGTGTGTTGGCATTTGTCGGTGACAGAGTTCCCTAT  
GCTGCTTCCAAAGGCAAGCGGGACTTTACCTCTTCAACTCAAATTTGTGGCGGGGCGCTAT  
GATGTGATTGTTCCCGAGAAGCTGCTCGGGAAGCTCGAGACATGATTGCCCTGAAAAC  
CGAGATCTCCGCCAA

>RXN02059-downstream  
TAAGTTAAACTAACGCCTATGAA

>RXN02066-upstream  
GGAACCTATCACAGGCGACATCCGTTTTGAGTAGGTATCTTGGATAAGAAGTTACCC  
ACATCCTTGAAAGTCGAGACACAGGAGGTATCGGAAGAT

>RXN02066

ATGTTCAATTCCGACACCACCGCGAATCTCCAAGCTAAAAGTCGAGATCGTGCAGGATCT  
AAAGCAAAGCGCAGCAGGCCAAGTTTTGATTTCAGTAGCGCGGGATGTTTTGGATGTTTCA  
ACAAAAACAGCACAAAGTTAAAAACAAGGCTAAAGAGTTTTCTCTGTTGATCACCTTTCA  
GCAGACGCCCGCAGCCATGTTTTGTAGACAATGAAGTGTCCCGTGGCGCCATGCATCGCGCC  
AGGCTGCACATTGTGCACTGCGCTGAATGTAGGGAAGAGATTAACCGTCAGCGGGAAACC  
GTTGATTATCTCCGCTCAGAGTGCAAAAACGAAGAAGTGTCCGCCCAATGGACCTCAAA  
GCACGGCTTGCCAGCCTCGCCACTGAGTGCATGCCTGGCCCTGGCGCAGAGAATTTAGCA  
ATGCAGCGCCCAGAGTCTTTTGTGGCTAAAGTTGAGTCCGTAGTGCGCGCAGTTCGTAAG  
AACCAAGGCCGC

>RXN02066-downstream

TAATTTTTTAATCCTTATTTACAT

RXN02067-upstream

TAAAGTTGAGTCCGTAGTGCGCGCAGTTCGTAAGAACCAAGGCCGCTAATTTTTTAATCCT  
TATTTACATTTTCTGAAAGACCGGTCTGATGTTTTCTAGC

>RXN02067

GTGGGTTGGGGAGAGATCTTCTCTTAGTTCGTTGTGGGCCCTGTTGTCATCGGCCCCGAA  
CGGTTGCCTCGTTTGATCCAGGACGCACGCGCTGCGCTGCTCGCTGCACGTACCGCTATC  
GACAATGCAAAGCAGTCGTTGGACAGTGATTTTGGTTTCGGAATTTGATGAAATCCGAAAG  
CCACTAACCCAGGTTGCACAGTACAGCCGGATGAGCCCCAAGACGGCCATCACTAAGGCG  
TTATTTGATAATGATTCCTCGTTTCTGGATGACTTTGATCCAAAGAAGATCATGGCCGAA  
GGAACAGAAGGCGAAGCTCAGCGCAACAAGCAGGCAGCTGACAACAATGCGAATGTGGTG  
GAACGTCCAGCTGATGGTTCCACCGCACGCCCAACGCAAAAACGATCCAAAAGACGGCCCC  
AATTACTCAGGTGGCGTCTCTTGGACCGATATTATT

>RXN02067-downstream

TAGCTTTTATTTAACGCCAAGCC

>RXN02075-upstream

AGTTTTTCGAATACCGTCTACGTGGAGCTTTGCGGAAAAATACGCACCGAGACCTAGGCGCG  
CCATACGCATGGTTACAGGATTTAGTACGATTAACCCC

>RXN02075

ATGTACAAGGTCTTCGAAGCACTGGATGATTTAGTTCAAGCCGTTCAACGCGCATACGGC  
GTTCCCATGACCGGAAATTGCGTGGTTCCCCGTCAGGAAGTGCTTGCGCTTCTCGATGAT  
TTACGTGATGCGCTTCCTGTAGAACTTGATGATGCACAAGATGTGCTGGACCACCGTGAT  
GGTGTGATCCGTGAAGCTGAAGAAAAGGCCATTGCCCTGGTCGACGATGCAGAAAACGAG  
GCCCCGAAACCTCCTTGACGCGCAACTGAGGAGTCAGATGCCATGGTGGAAGACGCCACC  
AAGCATGCGCATTCCTGTGCTTGCTAAGGCTAATGACACAGCGGATCGCATCGTGAGTGAC  
GCTCGTCGAGAAGCAAACAGCGTCACCGAGCGCGCCAGGCTGAATCTGAGCGCCTGGTC  
AACTCCGGCAATGATGCGTATCGCCGCGCGGTTGCTGAAGGCCAGGCCGAGCAGGATCGC  
CTGGTCAGCGAGGCAGAAGTGGTGCCTCGCTCCACGGAAGAAGCACACCGCATTTGTGGAT  
GCAGCGCACGCTGACTCCAACAAGCTGCGCAATGAATGCGATGACTACGTGGATACCAAG  
TTGGCAGAGTTTGAACCTCGCTGTCCACCACGTTGCGTTCTGTCACTGCTGATCGTTCC  
GCACTACGCCGAGGAGCTGGAGCTACTGGCCGCGAGCTGCGCGATGAGCAACCGGCAGCG  
CGTGGTGAATATGAGCGGGACTACGAGCGTGATTATGAACGAGGCTACGAACGCGACGAT  
CGAGACTAC

>RXN02075-downstream

TAGTTTCCAAGAAACCATTTAGG

>RXN02076-upstream

TAGTTTCCAAGAAACCATTTAGGCTTTTTCACCTTTCCGTCTAGCGATCCTCATCTGATG  
TATGTAGTCACGATGAGGTACGAGTAGGATCTTCTGGTC

>RXN02076

ATGAAATCTCCATTTATTTTTGATGTGCGCCGCACTCCTTCGTGGAAGTGCCCTTCCGGAA  
CACCTCACCCAATCAGGTCCAAGCCCCGACCCGCATTGGTCCGGAAATGATCGCGATCCCC  
GAGGGCGGAAAAGTTATCGTAGAAGCCCAGATCATTCCACTCGGTGGAGGCCTGGCCGTC  
GAAGCAGATATCGAAGCGCAGCTTCTGGGACAGTGCTCCCGCTGCCTCCGCGAACTCACC  
CCAACCAAGACGCTGCACGTCTCTGAGGTTTTTGCTGCCGATCCAGACTTTGTTACTGGT  
GAAGATGCAGCAGATGACGAAGATGAGCTGCCAATGGTTAACCAAGACCAGATTGATCTG  
CTTCAGTCTGTCAATTGATGAAGCTGGTCTGACCTTGCCGTTTAACCCGTGTCTGCGAAGAA  
CTTGGGTACGGCGCATGCCAGGATGATGAAACGCCAGCTCCTGACGGTGTCTCTGAAGAA  
GTAGAAGACGAGGAAAAGGTCGATCCGCGCTGGGCTGGTTTGGAGAAGTTCCTG

>RXN02076-downstream

TGAGCAGGAAAAAGAATCGCCTC

>RXN02094-upstream

TTCCACCTCTACACCGAGTTCTTCCAACCAACGACCAGATCATTGCTGCGGAGGAGTTC  
TCCAAGTAAATTTCTCTCCCTATTTTTAGGAGGCACCAC

>RXN02094

ATGGCTGAACACAACGCCATCATCACGGATGCAGTACATTCCGACCCCGCTGTTTTAGAA  
GACAACGCCGGGTTTCAGCGGAAAGTACCTAATCCGTGCCCTGGACAAGGCAGCTCATATG  
CAAACAGGTGCCATCGAGGGATACATTTCTTGGCTTCGGAAGCACAATCCTGAGAAAACA  
CCGGCGCAGCTGCAGGTACTCGTCGACAAGCATTTTATGCGCCTTGCCACCGGCTCTGGC  
GCTGGTGTGGGCATGGCTGCGGCCGTGCCAGGCATTGGCTTTGTACGGGTGCTCTTGCC  
GTTGGTGTGAATCGTTGGTGTTTTTGGATGCTGCTGCGTTTTACACCATGGCATCCGCG  
CATTGCGCTGCGCATCGACATCCGCCATCCTGAACGCCGACGTGGTTTGATTTTGGTGGTT  
CTGCTGGGCACCGCAGGCAAAGCCATTGTTGACGCAGGCGTCGGTGATTTATCCAAGAAA  
AACCACGCGCCGGGCATTGCGATTTCCTGGTTTAATATCGGTGGCTTGATGGAAGTCAAC  
GGCCGACTGATGCGCTACGCAGTGAAGGAAGTAAGCAAGCGTTTCCGTTCCGGCATTGATT  
GGCAAAATTTCTGCCGTTTGGTATCGGTGCGGTGCTGGGCACGATGGCCAACCGCAAAATT  
GCCAAGAGGACTGTGCGAAACGCATACGACTCTCTTGGTCTCTCCCCACCCATTTT

>RXN02094-downstream

TAAGTACTCAAGACCCCTTCCAAC

>RXN02104-upstream

CATGGATTCCCATTGAGCCTTATTTACACAGGCCACCTGGCTTGTTTTCCACCGCGAT  
GTGCCACAATAACGCCATAACAGAAAGGCATACTGACACA

>RXN02104

ATGTCCAACATCCCCACCGACGTTTCAACGAGCGCACCTCGAATTATGATCGCGCCAGAT  
TCCTACAAAGGAACCGCTACCGCATCAGAAAGTGCAGCAATACCTAGGCGAAGGCGTGTG  
GAAATTTTGCCCAACGCCTCCATTACGTTGGCACCCATGGCCGACGGTGGCGAAGGAACA  
TCCTCAGTTTTCGGCGGGCAGGTCATAACATTACCCACGACAAATGCCGCGGGACGCCTC  
ACCGAAGCCAGCTACACCTTAGATTCCGAAACAAACACTGCCTACATTGACATCGCCGCA  
GCCTCCGGTTTGCCCGCCGTTGCAGACGATCTAGTCCCCACCACCGGCGATACCTACGGC  
ACCGGCGTTTTGATCGCAGACGCGGTCAACCGTGGCGCAACTCGCATTGCTTTAGGCCTT  
GGCGGATCAGCCACAACCTGACGCCGGCTCAGGAATTCTCATCGCCCTCGGCGCCGTCCCA  
CGCAACAAAGAGGGCTACGCACTACGAACCGGTGGCGCCGACCTCATCAACCTCGATTAC  
ATCGATACCGCCGAACCTCAACATCCCCGACGCGCGTCAATGGATCCTGCTCACCAGAT  
GTCGACGCCCCCGCCACCGGCGCGCAGGGCGCGGCCACCGTATTGGGGCCCCAAAAAGGT  
GCCACCGAAAAAGACATTTGCTTCTCGACGCCGCCCTCCACCACGCCTGCGCCCAACTG  
GAAGTTGATGGCACAAAGCCAGGTATGGGCGCAGCCGGGGGCATTGCAATCGGACTGACG  
TGGCTGTCCACCCTCATGCACGGCAACGACCAACAGATCCATATCCTCCCCGGCGCGCCA  
CTGATTGCCCGCTCCAACGGAATCGAGGATGCGCTGCCAGAACTGACTTGTGATCACC  
GGTGAAGGCCGACTAGATTCCCAATCGTTTACCGGAAAGGTTGTGGGCACCCCTCCACGGT  
TTAGCTAAAGCCCACGATGTGGATCTCGCTGTTGCGGCCGGCATCGTGGAAGGCGGTATT  
CCCGATGATTTCTTAGCGGTAGAAATGATTAAATCCTCCGACGTTGCAGCACAATTACGT  
GATGCAGGCCGAAGGATCGCTCAAGAATACGTAGCTCAAAAC

>RXN02104-downstream  
TAGCGAAGGATCTCCACAGTCCA

RXN02107-upstream  
AAGAAGTAGAGCTCAGCGATGAAGATTCGCGGCAGGCCACGACCTAGTAAAAACCAAAT  
ACGCCACCGAGGAGTGGAATAAGCGAGTTCAATAGTTTCT

>RXN02107  
ATGGATCTGCACAAGGTAGCTGCAGCGCACGCGGCGACTCTTCCCCTGAGCACCAAAGAG  
TTTCCTTTTCGGACCCGAGCACGAAGTGTACAAAGTGCGGGGCAAGGTATTTTGTGCTGCTC  
ACGATACTAAATGATGAGCCGATTATCACGCTGAAATCAGACCCGAGATTGGCGCTTCA  
CTACGCAGTGGCTTCCCCACCATCCAGGCTGGATATCACATGAACAAAGTGCAGTGGCTG  
AGCATTAGCGATGGTGAACGGATCACGAAAGACTTCATCGAAGGTCTCGTGGAAGAGTCC  
TATGAAGTGGTAATTTCCACCTTGCCGAAGTATAAAAGGCCT

>RXN02107-downstream  
TAACTTGGTTGCTTGCGGGTGGC

>RXN02108-upstream  
AAGACTTCATCGAAGGTCTCGTGGAAGAGTCCATGAAGTGGTAATTTCCACCTTGCCGA  
AGTATAAAAGGCCTTAACTTGGTTGCTTGCGGGTGGCAAG

>RXN02108  
ATGGGTGATATGAAAATTACCCGCCACATCCATGCATGCGTTGAGATCTCACAGGGAAAC  
GATCGAATCATTATTGATCCCGGTACTTTTGGCGCCCCAGATTTATGTGGCGCGACCATC  
CTGGTCAACCAATCATGCCGATCACGTTGATCCCGAGTTGCTCAAGCCCGGCATGACG  
ATTTACGCGCCTCGATCAGTAGCACATTCAATTCCAGTAGAATGCCACATCGTGGAACAC  
GGCCGAACTTTACCGTTGGGTCCCTATCCGTTGAGGTTCTTGGTTCTGAACATGCGATG  
CTCACCCATTCCATGCGCGAAAACGTTGGATACTTAATCAACGCGCGAGTGCTC  
CACCCCGCGATACCTTCCAACCCATTAAAGATGTGGAAGTCCGCTGGTTCTGTCAAC  
GGCCCTGGGTGAAAATGCTGGATGTGGAAGGCTATTTGAAGAAATTTCCACCAAAGCGT  
TTCATCGGCATTACGATGGCATTGTTAATGATCGCGGTTTGGCGATCAACAAGAAGTTC  
TTAACGCATCTTGGTGAACCTATGGCTCGGAATACTCGCCGCTTGAAGAGGGAGAGTCG  
TTGGAAATT

>RXN02108-downstream  
TAGATTCTTGGTTTAGATTCTTG

>RXN02114  
TCCATCGGCTACGCCCTGGACCACCGCATTTACGCACTCACACCAGGCCTTGGCGGCATC  
GCCATTGGTATTTGGCTGCTCGGTGGTGTGCTCGGTGGGTGGTTATCCGCAAGCCGGGT  
GCCGCAATTTTCGTTGAAGTAGTGGCCGATGTGTCTCTGCAGCGCTTGCTTACAGTTT  
GGTATCTCCACCATTTACTCCGGCTTGGCGCAGGGAATCGGCGCTGAAATCATCTTCGCG  
CTGTTCTCTACCGTCGCTACAGCCTGCCCACCAACATGCTTGCAGGTATGGGCGCAGGT  
GGCGGCAATTTCTCGGAAATGTTCTTCTACGGAAACCTCGCAAAGACGATGTCTTTC  
AACATCATCTATTCCACCACTGTCCTTATTTCCGGTGCGATCCTTGCCGGCCTGCTCAGC  
TGGTACCTGGTCCGCGCGTTGGCGAGGACTGGTGCAGTTGATCGTTTCGCCGCTGGCCGC  
GAGGTA

>RXN02114-downstream  
TAAATGACCACCGCACTTGGAAC

>RXN02121-upstream  
CCGGGAAATCTTCAGGCGTCTCCTCCCATATGCTGCTGACAAATTCAGAACAGGATCGT  
TGGGATACCTTCGAGACAAACTTCGAAAGCTCCGCAACC

>RXN02121

ATGATCACCTCACCATTGAGCGCGAGCTGAAGCTGCTCAACGAGGGGGAACCTGGGTATT  
GTCCAGCAGTTGGTGGAATCAAGCAACATCGGATTCATCGTCGATCTTGAATTAGATGGC  
GATTATGGGTGGGCGGTCTACAAACCGGAATTGGGGGAGCAACCCCTGTGGGATTTCCCT  
CCTGGCCTGTACAAACGTGAACGTGCAGCCTTTGTGATCAGTGAGTTTTTGGGTGGAAAC  
ATCGTGCCTCCAACGGTGATCATGCACGATGCCCCGGCTGGTGTGGGCTCGGTGCAGTGG  
TTTATTGAAAACAATGGCGAACACTATTTTCCACTGTTTGACACCCGCGCTGACCTGCAT  
CCGAGTTTGTCCGCATGGCTGTGTTTGATCTGTTGTGCAACAACACTGACCGGAAAGCG  
GGCCATGTGTGTAGACGGCGATCATATTTGGGGCATCGATCACGGGTGTGTTTTTCC  
GTGCAACCGAAGCTGCGCACGGTGATTTGGGATTTTCGCAGGCTGCACCATTCAGATGAC  
TTGGTGACAGATGTTGAGCAGCTTTTGGAGGACGTCCCGGAAGAACTTCATCAGCTTCTT  
CATCCCGCAGAAATTGATGCGCTGCAGCGCCGTGCTCAAGAATCAGCAGGTTACCGTTC  
CTTCCGCAGGCGAAATCGCATCGTCAATTCCCTTGGCCACTTGT

>RXN02121-downstream

TGAGTAGGCTGGCGGGCAGGTGC

RXN02138-upstream

TCACTCGCCGAGATCCGTAAAAAGGGGAGTACACTGCAAGCCTATGATGTCCCGGCCTA  
AAAGTAATTCAAAGGCCAACAGTTAAGGAGACTAAAGCG

>RXN02138

ATGACCGCTCCATCAACCAACACCGGTGTTATCTTGACCGAGTCCGCAGCGTCCAAAGCT  
AAGGCACTCATCGATCAGGAAGGCCGCGACGACCTCTCTGCGTATCGCCGTTACGCT  
GGCGGCTGCTCTGGCCTTCGTTACAGCTTTACTTCGACGACCGCACCCCTTGATGGCGAT  
AAGGAAGACATCGTCCGTGGCGTTTCGCTTGTGCGTTGACAAGATGAGCACCCCATACTTG  
CTCGGCGCTCAGATCGACTTCGCTGACACCATCGAGCAGCAGGGCTTACCATCGACAAC  
CCAAACGCAGGCAGCTCTTGGCGTTGTGGTGACTCCTTCAAC

>RXN02138-downstream

TAAAGAGATTCCGTTATGTAGGA

>RXN02151-upstream

ATGAGCGCATCGTCTTTTTTAGGAGTTGTCCGCCACCGTGAAAACCTGGAACCTTAAACCC  
AGCCCCACAGCAGGTGACGGCTCCCCAGAACAAGGCTCGT

>RXN02151

ATGGATTGGCCAGACATCGCCAAGGGAATATCCATCCTAGGTGTGCTGTTACTACACGTG  
TCGTTGGCAATTCCAGGTGGCCAGGACACCATGATGTCCACCTGAACGCACTGCTTGAT  
CCACTTCGGATGCCATTATTTTTATGGTGAGTGGATTTTTTGCAGTTAAAGTTCTGAAT  
CAAAGCTTTGGTGAACTTTTCCGCGGGCGACTGTGGTTCTACCTGGTTCCATATTTGCTG  
TGGACTCCAGTGAATCTTTATCTACACCGCCTCGAGGGCACAGTTTTTACCGGTAGAGCA  
CCGGGAACATGGGAATGGTACAGCGGCTCGATGCTCTCGGCCACCAATATGTACTGGTTC  
CTCTACTTCTTGGTCATCTTCAACCTATTTTTATGGGCAACGAGAAAACCTCCAGCTTGG  
GCAATTGTGGCGTTGGTGGCCTCACTGTGGCTACTTATGCCGGCTTATAGCGAGATTGAG  
ATTCTACGCAAGTCCATTATTTACTTGCCCTACATTCCCTCATTGGCGCTTACTTCCGCCCA  
CTGATTTTCGCGTTTTGCAGAAGCCGCAACAAGGCCAAAAGCAATAGTGTTCGAGCGGTC  
CTTTATGTCTCGGGACTTGCTTTGGGCGTGATCTCAAATGGGCTGCGCGACAGCGAAAAC  
CATGGCCCAAGCGTGCTGTGGCTGATGAACCTCCGCGATACTTTTGCTCATGCACTCGGC  
GGCAACCTCACTGGATTTCGATATGGATCACCTTCCTGGAATGATCATTCCGATTGTTTCC  
CTGCCCTGCAGGAATTGTGTTGTGCGTATGGCTTGGCCGAATAAAGCCAGTAGGGGAGTTT  
TTGAAACTTATTGGTAGGCACACCTTCCCATCTACATTGGGCATGCAACAGGACTATCG  
CTGATTTTTTGGTTTCGGCTTGCCTGGAATTTTCATGGAGATTGATAACTTCTCTGACAGT  
TTGTGGCACCACCAATACGTGGATGGTCATCGCGTTTGCCTGCGCGATGCTCGGCGGG  
TACCTGACCTATCTGATCTCGCGAGTTCCAGTGCTGGGATGGACTCTTGTTCCTCCCTAAA  
CTGCCAGAACCAGATAAAACTCCAGCTAAAGCACAAGCTGATTCTCACGTTAAAGCTCAG  
TCTGCGAAGCCTATGAATGCTTCTACCTCTTCTAAGACGTACGGTATA

>RXN02151-downstream

TAAGTGAAGCATAACCTGTGTGA

>RXN02169-upstream

GTTAAAGGTCGAAAAATCCCACCCCTAGCCCTTTTAAATGAGTGTGTATTGTTAACCA  
CTGTTACTGGTGGGATTAATACTTATTTTTGGGAGAACTT

>RXN02169

TTGGACATGCAAATAAACCGCCGAGGCTTCTTAAAGGCCACCACAGGACTTGCCACTATC  
GGCGCTGCCAGCATGTTTATGCCAAAGGCCAACGCCCTTGGAGCAATCAAGGGCACCGTC  
ATCGACTACGCAGCAGGCGTCCCCAGCGCAGCATCCATTAAAAATGCAGGGCACCTTGGA  
GCTGTCCGTTACGTGTACAGCGACGCCCCGGCACTGAATCCTGGATGATCGGCAAGCCA  
GTCACACTGGCAGAAACCCGAGCTTTTGAACAAAACGGCCTCAAACCGCATCCGTCTAT  
CAATACGGAAAGGCAGAGACCGCCGATTGGAAGAACGGCGCCGAGGAGCGGCAACCCAC  
GCTCCACAGGCAATTGCGCTTACGTGGCAGCTGGTGGCCCTAAAAATCGCCCCATCTAC  
GTGGCGATCGACGACAACCCAAGCTGGTCTGAATACACCAATCAGATTGCCCCCTACCTC  
CAGGCATTCAATGTTGCGCTGTCCGCTGCCGGCTACCAGTTAGGTGTCTACGGCAACTAC  
AACGTCATTAAATTGGGCTATCGCCGACGGCCTTGGAGAATTCTTCTGGATGCACAACTGG  
GGATCAGAAGGAAAGATCCACCCACGCACCACCATCCACCAGATCCGCATTGATAAGGAC  
ACCCTCGACGGAGTCGGCATCGACATGAACAATGTCTATGCAGACGACTGGGGTCAGTGG  
ACCCACAGGCAACGCGGTTGACGATGCCATCCCCACCATTCCTGGAAACTCCAACACGGGA  
ACAGGTACTGGAATTGATGTGACACCATCAACCAAGTAATCAAGATTCTTGGCACCCCTA  
TCTAGC

>RXN02169-downstream

TAAACTAGCCGTGCTGACTCACA

>RXN02180-upstream

GTTTCAGCTAAAAGAAGAATCCTTGCTAGTGGAATCAGCTGAGTTTTCCACGAGTTTTCC  
AGCTTTCTCACAACTTGAATAGAAATTGAGGTATCCGGCA

>RXN02180

ATGACGTCAGGGAAATCAACGAGTACTAGGGGAGCCCTAGACCGGTATTTCAAATCTCG  
GAGCGAGGATCAAGCATTTGGCACGGAAATCCGTGCAGGTGTGGTCACATTCTTCGCGATG  
GCCTACATCATCATCTCAACCCCTTGATCCTTGGCACCACCCCTGACGTAGAGGGCAAC  
ACCCTAGGCATCGCACAGGTTGCAGCGGCAACAGCGCTTGCCGCTGGTGTGATGACCATC  
GCGTTTGGTTTGATTGCGCGTTATCCATTTCGGCATTTGCTGCTGGCCTGGGAATTAACACC  
ATGGTCGCCGTGACACTGGTTTCAGGTGAGGGCCTGACCTGGCCGGAAGCAATGGGACTT  
GTGGCTCTTGACGGTGTGGTCATTGTTATTTTGGCTGTGTCCGGCTTCCGTGTTGCTGTG  
TTCCGTGCGATCCGACATCATGAAGCGGCCATCAGCGTGGGTATCGGCCCTGTTTCATC  
GCCATGATCGGCCCTCGTGGATGCAGGCTTTGTTTCGCCGTATTCCAGATGCTGCCGGTACT  
ACTGTGCCAGTGACTTTGGGCATTGATGGTTCCATTGCGTCTTGGCCAACGTTCTGTGTTT  
GTTGTCCGTGTTCTTCTCTGTGGCATCCTTGTGTCCGTGAGTTTCGCGGTGGACTGTTT  
ATCGGCATTTTGGGAACCACCATTTTGGCGATCATCGAGAAGCAATCTTTGATTCCGGT  
GCGTCTTTGAAAATGGTGAAGCAAACGCAGAAAGGCTGGTCACTCGCCGTTCTTGGTCTC  
CCAGACTCCTTCCGGTGGCATCCCGGATCTTTCCATCGTCGGCGCAGTTGATTTGATCGGT  
GCGTTCAGCCGCATCGGTGTGGTCGCCGCGACCTTGCTGATCTTTACCCTGGTCCTTGCA  
AACTTCTTCGACGCCATGGGCACCATGACCGCTCTTGGTAAGCAGGGCAACTTGGTTGAT  
GATGAAGGCAACCTTCCAGACATTAAGAAGGCACTGGTTGTGGAAGGCGCAGGTGCCATT  
GTCGGTGGTGC'TTCTCTGCATCCTCCAACACCGTGTTCGCTGACTCTTCTGCAGGTGTT  
GCAGACGGCGCACGAACCGGCCTTGCCAACGTGGTCACCGGCTCCTTGTCTTGGCTGCC  
ATGTTCTTGACCCCACTGTATGAAATCGTCCCCATCGAAGCAGCAGCACCAGTGCTTGTA  
GTTGTTGGCGCGATGATGATGGGGCAGGTTACCGAGATTGATTTCTCCAAGTTCTACATC  
GCATTCCCAGCGTTCTTGACCATTTGTGATCATGCC'TTTCACCTACTCCATTGCAAACGGC  
ATTGGCGTTGGATTTCATCATGTACGCCATCATGGCTGCAGCGGCAGGCAAAGCAAAGCAA  
GTGCACTGGCTGATGTGGCTGGTCGCTGGACTCTTCGTGCTGTTCTTCGCGATTGATCCC  
ATCATGGAAGCTGTCCGC

>RXN02180-downstream

TAATGACAACGCGCACGGTAATT

>RXN02185-upstream

CAACTCCTTGGGGTGAAGCCAGACATCCACTGGCAGAGCAACTCCTCCGCTCTAACCCGA  
CAGCTAACCTCGACGGCGACAAATGAGAGGAAACTTTTC

>RXN02185

ATGGGACGTCACCTCCACTAAGACTAGCTCCGCGTTACCAAGCTCGCAGCTTCCACCATC  
GCTTTTCGGTGCTGCTGCAACCATCATGGCTCCTTCTGCATCTGCTGCACCTGATTCCGAC  
TGGGATCGCCTCGCACAGTGCAGTCCGGTGGTAACTGGGCAATCAACACCGGTAACGGC  
TACCACGGTGGTCTGCAGTTCTCCGCTAGCACCTGGGCTGCTTACGGCGGCCAGGAGTTC  
GCTACCTACGCATACCAGGCAACCCGTGAGCAGCAGATCGCTGTTGCAGAGCGCACCTTG  
GCTGGTACAGGGCTGGGGCGCATGGCCTGCTTGCTCCGCTTCCCTTGGACTGAACTCCGCT  
CCAACCCAGCGTGACCTCTCCGCTACCACCTCCACCCCAGAGCCAGCTGCAGCTGCACCA  
GCTGTTGCTGAGTACAACGCTCCTGCAGCCAACATCGCAGTTGGCTCCACCGACTTGAAC  
ACCATCAAGTCCACCTACGGCGCTGTACCCGGCACCTCGCTCAGTACGGCATCACCGTT  
CCAGCTGAGGTTGAGTCTTACTACAACGCTTTCGTCCGC

>RXN02185-downstream

TAAATCTAGCTGCACTTTTTAA

>RXN02186-upstream

TCCAACCAACCCCTTGAGGGTGGGGATGGGGGAGTCTTTTTTCATGATGTTGTTAAGTTTA  
AGCCTTGTTGAGGTGACTTTTGTTCACAGAGTTTGAAAGA

>RXN02186

ATGTATGACATGGCAAACGTAGAGAAGAAGCACTTCGTCGATCCGGCATGGCCGGAGCAC  
AATCCAGCTGACGGACACGTCGTTACTGAACTCATCTCCAAGGTGCGAGGCGCGTCCAGC  
CCATGGGGCGATGACAAGGAATTTCCAGTTTCTGCAGAAGAGACCGGATACGTTACCCCG  
TACACCCGGATCAACCGC

>RXN02186-downstream

TAAGAAACTTAAAAAGAGGCAA

>RXN02207-upstream

GAATCGGTGACTTTTGCCAACACCAATCACACAAGCCCTTGATGATGTCTCCCTGTGACTT  
GGTCCAATTACATTCACTGGTAATCTGAAACCTTGTGAAT

>RXN02207

ATGCGCCGTGATCCCGTGTGTCCCGTTTGCTTCCCGCCACAGCTTTGCTGGCCTCAACT  
GCACTTCTTTTAAAGTGATGTACGCAAGGGGTAACGGACTCCCCGGATATGGGCAAGGCA  
ACTCCCGCTGTCTCCCCCGCAGCAAGCAACCCGGATGGCCAAGTAATTGAGTTCGGCAAC  
ATCACTGACATGGAAGTCACTGATGGTGACATCCTCGGTGTACGCACCGAAGACGCACTC  
GCTATTGGTACAGTCTCCGACTTCGAAGCGGGTAGCCAGGTGGAACCTGGACGTCGATAAG  
CAATGCGGCGACCTGACCGCAACCCGGCGGCACTTTCGTGCTCCCCTGCGCCGATGGCGTT  
TATTTGATTGATGCCAAGGACCCGGATCTGGATGAGTTGCGTGCAACTGACAAGCCAGTC  
ACGGTGGCAGCCTTGACCAGCGATGATCAGCTTCTGGTGGGCAATGGTGAAGATGAAGAA  
CTCACCATCTACCGCGAGGGCGAAGAGCCAGAAACCTTCACCGTCGCGGGTCCCAATACC  
CAGCTCATCGCCGTTTCTGTTCATTGATCGCCACGACGCGGTTGTGCGCACCTGGAACGAA  
AACACCACGATTCAAGATGTGGACTACCCCAACGACCGTGAAGGCGGACCCCTTCGCGTG  
GGACTCGGCGTTGGTCAAATGGCTGGTGGCGAAGACGGCCTGCTGGTGGTCTCTGATGAA  
ATGGGTGGCCAAATTGCCATCTACAACGCTGATGATGTCATCCGACTTCAAAATGACCGC  
CCCCACCGACGAGGAACC

>RXN02223-upstream

CTTGCTTTTGAGGGCCGCTACGCGCAGCTGTATCAACGATGGAGTGCTCAATAGTTCAAA  
TCCACCACAACTCTAGAGATTTGGGGTAGAAACGAAGAC

>RXN02223

ATGAGCACCTACCAAGACGATCGTTTCCCAGGCCAGACCCCTACGCACCGCTTGGTGAA  
AAGCCAAGCTTTACCCCTCACCTCCACCGACTTGAAAAACGGTGCAAAGCTGGCCGAAGCC  
CAACTCGGTGGCACCGATATTTCCCCACAGCTGTCTGGTCAGATCTTCCAGAAGGCACC  
AAATCCCTCGCGATCACTGCCTCGACCCAGATGCCCCAACCGGCGCTGGTTTCTGGCAC  
TGGGCAGTGTTTAACATCCCCACAACGTGTCACGGAGATCCCCACCGGTGCTGGCGATGAA  
ACCCTCGGCGGCATCGAAGGCGTAGTTTCCCTCAAGGGTGATTCCGGCAAGCGTGGCTTC  
TACGGAGCGCAACCTCCAGCTGGCCACGCACCGCACCGTTACCTCTTCGCAGTTCATGCA  
CTTGATGTGAAAAAATCGACATCGCCCCGACGCTACCCCCACTGGTCTAGGCTTCAAC  
CTGTATTTCCACACTCTTGGC

>RXN02226-upstream

CTGACACCTCCTATGGCACGCGGTATGTTTAATAAACGTAATTTCGAGTTTCGGCGGCCGT  
GTCGCGCGGCCAGGACGACCCTAGCTTTTAAGGACCCACC

>RXN02226

ATGACTGAGAACCAGACTCCCAGCTCCACCTCTGCACCGAAGCCGGGACCTCGCCCGGGC  
CCACGGCCAGGACCCCGACCTGGGGCTCAGGTTGCTGCAAAGAAAGCTGCGGTTGCTACA  
CCTGCGCCGATCGCCAAAACCTTCTAACGATCCTGCAAAGTTTGGTCGCGTTGAGGCAGAC  
GGATCTGCATATGTACACACCTCTGCTGGCGAGCGTCTGATTGGTCTTGGCAGGCCGGC  
ACCCCTGAGGAAGGTCTTGCTCACTACGGCGCCCGTTTGTATGATCTGGCCACCGAAGTT  
GAGCTCATGGAACAGCGCCTAATCTCCCACCCCTGATGATGCGACCTCCATCCGCACGAAG  
GCTGAAGAATCAAGGCAACCCCTGCCACCATCGCTGCGATCGGTGACCTTGATGGCGTT  
GAAGCTCGCCTGTCCAAGATCATCAACAACCTCCGAGGAAGCCAACGAGCGGCCAAGGAA  
CAAAGGCTAAAAACCGTGAGCGCGCAGTAGCTCGCAAGGAAGAGCTCGTGTGAGGCT  
GAAACCTTGGCAGAAAACTCCTCCGACTGGAAGGTTGCTGGCGACCGCATCCGCGCCATC  
CTGGATGAGTGGAAGTCCATCCACGGCATCGACCGCAAGACCGATGATGAACTGTGGA  
CGCTACTCCCGTGCGCGTGACTCCTTCAACCGTCGCCGCGGCGCACACTTCGCAGAGCTG  
GATCGCACCCCGCATCTGACGCAAACTCAAGGAAGAACTCGTTGAGCGGCCAATGCT  
CTCAAGGAATCCACTGAGTGGAACGACACCGCCCGCGCATTCGCGGATCTCATGACCGAA  
TGGAAGCCGCGGCCGCGCACACGCGAAATCGACGACAAGCTGTGGGCAGCATTCAAG  
GGCGCCCAGGACTACTTCTTTGATAAGCGCAACGCCGTAGCCAAGGAACGCGACCAGGAA  
TTCGAAGCCAACGCAACCGCAAAGCAGCAGCTCATCGACGAATACGACGCACAGATCAAC  
CCCAGCAGGGCCTCGATGGAGCGCGCAGCAAGCTC

RXN02238-upstream

GGCGCTTAGCCAAAACATAGAGCGGTAGGGTATGCTTATCCGATTGAGCAACCTTTCCCG  
CTCTTAACACTACTGTCCATATACTTTTGAAGGTTGTCA

>RXN02238

GTGACCAACGTGAGCAACGAGACCAACGCCACCAAGGCCGTCTTCGATCCGCCAGTG  
ATTACCGCTCCTCCGATCGATGAACTGCTGGATAAGGTCACCTTCCAAGTACGCCCTCGTG  
ATCTTCGAGCCAAGCGTGCGCGCCAGATCAACAGCTTCTACCATCAGGCAGATGAGGGA  
GTATTCGAGTTCATCGGACCATTTGGTTACTCCGACGCCAGGCGAAAAGCCACTTTCTATT  
GCTCTGCGTGAGATCAATGCAGGTCTGTTGGACCACGAGGAAGGT

>RXN02238-downstream

TAAAAGACCTTATAACTTCACAC

>RXN02254

ATCGCCGTTGCCGAAGAAGGCGGATTGTGGGAAAACCTCCTGCAGCACCGCTTCGGTGGA  
CATGGTGCGCTAGCTGGTCACGCCTTGGGAAAACCTCGTGATCGCGGCGTTGACCGACATT  
TTGGGACCTCCCAGCATGCGCTTGATCAAATCGCTCAACTCGCTGGAGCCAAAGGACGC  
ATCATCCCGGTATGTGCTGAACCTTTGGATCTTGAAGCGGAAGTATCAGGTCTAGACTCT  
GATGCTCGAGTCAATGCGTCAAGTTCTGTTGTTCAAGTGGCGGTAGCTGCAACCCCCGGGCAG  
GTGCGACGCGTTCAATCATTTCCGACAATCCAGAACCAGAACCCCGCTGCCATCGAGGCC  
ATTCTCGATGCAGATTTGGTCAACCTTGGCCCAGGTTCTTGGTTCTCCTCTGTGATTCCA  
CACATTTTGGTCCCAGGGATCGTTGATGCCTTGGCGCAGACAAAAGCAACCAAAACCGTG  
GTGTTAAACCTGACGTCCGAGCCAGGGGAGACCGCGGGATTCTCTGCAGAACGACACATC



CATGTGCTCCGCCAGCATGCTCGAAACCTTCAGGTTGACCAAGTCATTGTCGATGCCAAG  
ACACTGTCTCTACAAACCGAACGCAATCATGTAGAACGAGCTGCTCGCACCCTTGGTGCA  
GAAGTCTCCTTCCATGATGTCCAGGCTGAAGATGGCCGTGGTCGATTACACAGTATTAC  
GATCCAGCAAAGCTGTGTGCAGCGTTGCTGGCAAGTTTTGCTGGAGCACGAAAGCGT

>RXN02254-downstream  
TAAGGAGTAGGCGTGTCACTGAC

RXN02271-upstream  
CACTCCCCTATCCTAAGCCACATCTCGGTTTATTAACTGTTAGTGAATTCTCACCCGCA  
ACACTGGTGTATTTACAGTTACATCCGTATGGTTATTGGTT

>RXN02271  
ATGAGCTTTCTTAACCTCTGCAAAAACCAAGACCGTAGCCCTCACCGCAACCTTCGTTGGT  
GCAGCAACCTTGCAACTCCTGCAATCGCATCCGCTGACATCGTCGACAACGCCCTCGCA  
GCCCTCCCATCCGGTGAGATCAGCTGCTCCAGGCTGAAAAGTACTGGACCACCGAAGCT  
GATTACAACAGCAAGGTTGCACAGGCCAACGCCTTGGCAATGTTGACTCCCGCGGCCCA  
CAGATCCAGGCAGCTCTCGCACGCGTTGACGAAGCAGCAAACCGCTGCGGACTCAAGGGC  
GGCACCCTAGCTGCGCAGGCTGAGGCAACTGAGGCTGCGCCTGCCGCTCCAGCACCTGCA  
CCGCAGGATAACACCGGCACCTTCTCAGACTGCCCTGCCCGAGCAGCACCAGCAGCACCA  
GCAGTACCCCTGTGGTTAACTTGCACCTGCAGGATCACCAACTTTCACCATTTGAAGTT  
CCAGGAGTTGGCGGGTTAGCTGCCAGATCTATACCAAATCGTCCAACAGTTCTTGGCA  
CAGTTCGGAATCAAGATC

>RXN02271-downstream  
TAAATCTATTACATCCCTTAAC

>RXN02279-upstream  
GGTAAGAGGGCATTTCGATGCGCAGCGATTCTTGCTCAACGCCGACGAGCTCGCGGAG  
CTTTCTGATTATGAGCGTCTGGCTTATGCCATCACCTTGC

>RXN02279  
TTGATCAGCCTGGAAAAGAAGCAGAAGGACGCGAACTTTTTCTTTTCGGAGCTTCGCCGC  
CAGGGCTACCGCGCTGTCGATTTCTTGGAATCCCAGACTGTTGACCAGCTGAATAACCCC  
GATGTCCAGACTTACCTCACCGAAGCGGAACCTGATTCGCGATGACTTGAGGTCTTGGGCA  
GTCATCAATCAAAATGGCATTTGGACAACATCGATCTTGTTCCATACGGCGAGGAAAACGAC  
GAGCCACTTGCAATCGCCCGCAAGATCATCGAGGAAACCGCTTCCCATCCTGAGCTGAGA  
TTCGAAACCTCGAGGCCAGTTCTCCGAGTTTACCATCTTGCTTGCTCAAAGCCCGGAG  
AACCCTCAGCTAGCCCGCTACAGGAGCTTCCGTACACAGGGAACTTTGTTCAAGAAGCTC  
GCCTTGGACAGCATTTTCGGCCAACATGCCGTTGTTCAAGACACCGGAAACGGCGAAGCC  
ATCCTAGATGAAACTATCGGGTACATGATCGGCGCCGGCATGCGTGAAACCACTGCCCGC  
ACCGCCAGCCAGTTTCGCGCAGCTTTACTCATTTGTGGGCAGGCAGGAACGCTCCATTGAA  
ATGGCAGCACTCGCTTTTCGAGGAACCTCAAGCGGCAGGACTTCCCCACCGTGAGGAAGAA  
CTGCGATTGGGCGATGCAACTCGCCAGGTTGAACCAATTGAAGCCCGCGAAATCCTGGAA  
AAGCTGCTGCTGCCTAAATTCGAGCAGAATCTGACACTTGATGAACTTGAAACTGAAGCA  
CTCCTTCCTTTGGGTGCTACCGTTGCTATCCACGACCCCCAGGCTGCCGAGCAATTTTG  
CGCCACGCTCGGAAAACGCCCGCAGGGTTCCGGCAACTTCGAACTCGCAGTCCAAGCGATG  
ACCATGATCACGATGTCTCTACACCCAAAACATGCACGAGCAACTGCTGGAGGAGCTC  
AACCCTCTCTCCCCATGCTCAAATGCTTGATGATCAACACCAAGCTGAACTGAAACTG  
CTGGACAGCATCGCCATCGTCCAGGCAGACCTCGGTTCCACCGAAGCGCTGGAAACCTG  
GGCACCAGCAATGGGACTCGCAGAAACACAGCTCAGAAGCTATACGTGCAGGAATCCCTC  
AACCGCGCATACTTCACTTTTGCCCGCCCTGAAGATTGCATCAGCGGAGCAGCCGACGCT  
TCTGCCCTGGCCATGCAAAACGATGACCTTCCAATGCAGCTGCCAGTTGGAGCAGTGT  
GCACAGTACTTGTTCCAATTGGGCCACGAAACTGACGGCGCAAGCCTGCTGGAATCTGCA  
TTCAGGGTTGAAGGCATCCCCACTGAGCAGGCACTGTACTACGCAAATGCACTGTCTTCC  
ATCTATGAAGATTTCCGGCGATTCCGCGAAGTCGCAGTACTGGGAGCAGCAGGCGCAGGAA  
AAGCAGCAGCTTCTGGAG

>RXN02279-downstream

TAACGGCCGTTTAAAGAGTCGAA

>RXN02296-upstream

GCATCATTTGTGTTGTTTAAAGTATATGGCTGTTGAAGTGCCATTTTCGCGGATTAGCAT  
GGGAATCACCAGTATTTCTGGACGGTTAAGGATGATTTCAT

>RXN02296

ATGCGTAATCAACAATCGCTGCGGTGCGAGCTTTGGTCCCTGCTCACCGCCGCCACGCCC  
GCGATCGCTGCCACCCCGGCGACAGCTGGAACCGGACTCTATTCCATTGACATGGGCGAC  
GAGCAAAAGCTTACCTGCGTGCTTTTCGATGAGCCCTCCACCGAAGCGCACGTCGTCGCC  
AGCTGTGCTGCGACTTTCCCGGTGACCTGGAAGCTTCTCGACGGCGCTCACGAACAAGCC  
GCGAAACTTGAAATCACCCAGGCTCAAGACGGTGAACCTCTCGGTGACAGCCAGCAAGCAG  
CCGTTGATCACCACGATGATTGCGCCACCAGCATCACTAAGCCCATCACTGTCAATAGG  
CTTGTGGTTGTTCTGGTGAGAATGAGGTTGCTTTTATGCTACCGATCCTGATGTTTTA  
CCAGTGCTGATCACGCTGACTCCTATGAAGTGTTGACCGATTCCGCTGCTAAAGTGAAA  
GCGACATTA

>RXN02296-downstream

TGAAATAAACGTGGATCAAGGAG

RXN02300-upstream

GGGTCAATTCGGTGAACACGGATTTTCGCGCCGGTGAATCTGACGGTCAGCCAATTGCGGG  
CAATGCTGTCCAAAGCGGAGCGTAAAGATAAGGATCAGAA

>RXN02300

ATGAAAACCTTATGCAGTACTAATTGCGGTGGCAGGGTTGGCACTTGCTGGGTGTAGCTCG  
TCGGCTCCTGGAATCTGGCGTGCCACTGAACCCGAGATGCCTACCTTGAAATAGCCGAT  
GACGGCACGCTGTCCGGAACCGACGGCTGCAACAGACTTTTGGTGGCTGGGAAAAGAC  
GGCTCTACCATCACTTTCGGCGCCATCGGTATGACAGAAATGTACTGCGAAGGCGTCAAC  
GATTGGCTGTCCCAGATGCACACCGCCACCGTCACCGATGCCACCATGACCATTTTCAAC  
GAGGCCGGCAGCAATATTGGCGAGCTAAAACGC

>RXN02300-downstream

TAAATGCTTCTCGACGTCAAAAG

>RXN02301-upstream

GCTTCGCATATGTCTGGATCTTATTGGATGTATGAGTCAGAGATCAGGGAGATCGCGCAC  
TAACCGAACCTGGCCAGTGCAACAGGATTATGTTTAAAGC

>RXN02301

ATGGATCTTGCACTGGCTCAGGTTGATTCCACCGTTTCGGGGCTTTATGACGCCCTCGAT  
CTCATCGGCGTGCTGCTGAACGGAATAATCGGTGGAACGATCGCCAGGCAACGAGGCTAT  
GACATCATTTGGCTTTCTGTTCTGGCGTTATTTCTGCGCTGGGTGGCGGAATGATCCGT  
GACATGCTGATTTCAGCAGGGGACTGTCGCGGCGATCGATAATCAGATCTACCTTGCGCTC  
GCGTTTCTGGCGCGCTGATTGCCATGGCGGTGAACTTTAAAGGCAGGGTGTGGGAGCTG  
TTTAAAGTTCACGGCGATGCCATTGTGTTGGGCGTCTGGGCGGTGACGGGTTCCGTGAAG  
GCGATGAATGCGGGGGTGGCTCCGCTGCCGAGTATTTTCATGGGCGTGCTCACCGCGGTG  
GGTGGTGGCATGGTGCCTGATGTGGCTACTGGCCAGACGCCGACGATTTTGGTGGCGGA  
ACTCTTTACGCTGTGCCCTGCGACGCTTCTGCCACGTCAATGGTTATTTTTCATAGCTTT  
GACCAGGTAATTCTGGGTATGATTATTTACCGTTCTTGGGTATCGCGTTGGCGGTTACT  
GCGTATTGGTGCGGTTGGGTCAATCCCGTGAACACGGATTTTCGCGCCGGTGAATCTGACG  
GTCAGCCAATTGCGGGCAATGCTGTCCAAAGCGGAGCGTAAAGATAAGGATCAGAAA

>RXN02301-downstream

TGAAAACCTTATGCAGTACTAATT

>RXN02302-upstream

GGCCAGGTTTCGGTTAGTGCGGATCTCCCTGATCTCTGACTCATACATCCAATAAGATCC  
AGACATATGCGAAGCTAATGAAGGAAACGAGGAGCTGATA

>RXN02302

GTGGCAACAAATCGTACATCTTCCGCTGGTGTATCACGTCTGTTCTCGCATCCGCTTTG  
TTCGGAGCGATCTTTTCATCTCTGGGGCGATTGAGGCAAAGGCGGAAACACTTGTGCT  
TGGCGTGTCCCTTCTAACAGCGCATGCTATTTGCTTGCCCTTCTGCACCCTGCTGGTCGG  
AAGGTGTTTAAAGGAATTTTGGGACACACTAAGGTCCCAACCTCGTCAAATTCTGTACTTT  
ATCTTCTCGTTGTACTCATCACGCTTACAGCTGTGGCTGTTTCTTGGTCGCCTAAGAGT  
CATGCTTTAGATGCCTCACTTGGTTACCTGTTACTGCCCATTTCCTAGTAATTGTGGGG  
CGGTTTTTCTTCGCTGATTACATCACCAGGCTGCAGTGGATTGCGGTGGGAATCGCGCTG  
ATCGCAGTAACCTTGAAATTTGTCATTAGTGCGCAATTATCGTGGGTAACTTTGGCCATC  
GCTGCGGGTTATGCACTGTATTTTGCCTTCGTAAATACTCGGGGCTGAACAACGCTTTT  
GCTTACGGCGCAGAAGTTTTAGCGTTAAGTCCCCTGGCATTTTTCATGCTCGCCACTGTC  
GAGGATCCGCTGTCTAACGCCATGTTGTCAATTGGTTATTCTGGCGGGCCTCGCTGGCGCA  
TTAGCTATGGCGTTGTATCTAGCCGCTCAACTCTGCTTAGTATGCCGATGTTTGGCCTG  
CTCAGTTATGGTGAACCAATCTTGCCTGTTTGTGTCAGCACTATTACTTGGTGAAACGTTG  
AATCTCAGCGACGCCATTGTCTACTACTACTGGCGTGCGCCCTGGCGTTACTGGGATTT  
GATGGGATACGAAGGTCTCGAAAAACCTCGAGACCGAT

>RXN02302-downstream

TAACTTCTGCTCAACTTCCCACC

RXN02303-upstream

GCCCCGGCCGAAATCATTCCAATCTCACCCCCACCCAAAAACACTGTTGATATTTTCACTT  
TCCAACCAGCGACGTGAGCGCACGCACTAAGGTTGTGCCC

>RXN02303

ATGGCTGAAAAACAACACCCCACAAGAACTGAACAAGATCAGGAAGCACGCTTCCGTGAG  
GAGTTCGAGGTTGGCGGTAAGGATCGTCAGCTTTCTGAAGAAGAACAGCTGGAGCAGCTC  
GGATCCGATATATGATGCGCACTACCCTGTTCCAGATTTCACGCCCCCTTGGGCAGGTGGC  
GCGGGCGATCCTGATGTCAGCAGACCGCTATATTGCACATCTTCCCGATCGCACACGCA  
ACTGCGATGATCATGTTGGGTTCTGGCCTTGATCATTCCATGCCGGGTGTCGATTTATC  
GGTGGTGTGAGCGTCGATGACGTCCCGGAGGTGCGAGGCGCGATTTTCCACCCGTCGAAT  
CCGACGGGCCGCTGGGCTGTATCGTTCCACAGCGGTGGTTGGTGGCGCGGTTCCGGTGAT  
GCGTTGGAGTTCCAGTGGCGTCCAGAGGTGCGGGCAGCTGCGGAATTGTCCGGCACAACC  
ATCCTTGACCTGGACTATCCGCTGGCCCCAGGCCATAACCTCCACGATATGAATGAGGTT  
GTGGGCAAGGCGGTTCGGTTACGCCCCGCCACCATAATCCGGTGTGATCACGGGTGGGGT  
TATTCCTCGGGCGCGCGTTAGCCGCGATTAATGCATCGCTTTTCGACGCCCTGGTCTC  
ACCTTTCCGGACCTGGGTAGCGTTCGAGAAGCTCCCTGCCGAAATTTCGTGGAGACGCTGTA  
GTGCCCCGCGCGGCTGCGTGGCCGACGACCTTTGTGCAGATCGCGGCGCAGGATGAGATC  
GCGGAGCGGCCAGGAGAGCTTGGCGACGCGACCGTGAAGGAATACGTTTCCCGCCACCGT  
ATTTCCACACCGAAGGTGCGCGCGCAAAAAATCACCGACGTGGCGGAGTTCCTTAAAACT  
GTTTGC

>RXN02303-downstream

TAATGTGCCAGCAGGTTGTAAAT

>RXN02307-upstream

TTTTGCATTAAACCCAGGTAGGGGCATTGTGCGCAAAGCCCAACTACAGCAAGGTGCGTAC  
GCTGGTGGCCAACTGAATACGTTTGAGGAGAAGGTTTCT

>RXN02307

ATGAGTGGCACCGCCATCATGTACGACACGACAGTTGTTCCATCGAAGAAAGAAATCGCG  
CAGGCTTGGACTGGTTATGTGGATCTTCAGGGAAGCTACCGCTGGTAGATACGGTGGAT  
GGGGAAGTTGGCGTTGAGGTGCTGATTTCAGGATCGGGAGGGGCGTTTACTCCAGATT  
CCGTTTAGTTATCGTTCCGCGAGAGATTAACCCAGAGCAGACACTTCCACATTGGAGCAT  
GGTGTGTTGGGCAAGCGTTGGGTGACTAATGCGTTGGGTGACCCGTTGGCAGTGCGGGAG  
TTTATTGCACTATTTTACGGGCGATGATGGTGCAGCTCGTAGCGATGGCGTGAAGGGC  
TATCTGGATATTAAAGGTTCCGGCGATGCTGAGTGGTGGATTACAGGATGTAAAGCTT  
ACTGAGGTTACAAGGCGAGCGTGGGATTGGTTCCGTAACCATCAACGGTGAGCGAAAGCAA  
TTCTCGCTGCGGTTGCCTCAGTTGCTGAAGAAATTCAGGGAGACAGCCGCGGGCCATACA

GCTACGACTCTTCGTATTGTGGCGACTCATCCGAAAAAGGACGATGTTGAGCTGCTGGTC  
GCTGAGTTCAACTGGATGGAA

>RXN02307-downstream  
TAATCCGAGACAGCTCCTGAAAG

RXN02314-upstream  
TGATACCACCGAAGTATCCGGATTACCATTATTGAAGCTTCGACCGTCCGAGATACCCG  
CCGTGCACAACAGCAAGCTCTCATGGACACGGTGCCTAA

>RXN02314  
ATGGAGTGGTACCAAGTGCGCCGACGGGCCCCGACAACCTGCTCATTGTCCTTTTATAGCA  
GCGATGCTCGGAGCAGCCTCCATGGTGATCGGGCCATTCTTAACGACCGCACTATCGAA  
GGCAACTCCGGGCGCGCCTTGGCACAAGTAACCAACGTCGGCAGCTACCGCACAACGGTG  
GATTTCGAAGATGAAAACGGCATCTATCACTACCAAGCCACCGGCCTGTTGTTCCCCACG  
GGACTGGGCGAGGGGCAACGCGTGTGGGTGAACTACGCCAAATCAGATCCAGACCTGGTC  
AAAGTAGAAGGCCGCAAGTGGACACTGTCCATCATCCCAGCGCTTAGTGTGCGAGCTGTC  
GCCACCGCTACCTGGTCAGTACTATGGCTGGGAGTGGGAGATTTCGGAAGACGATCCGAC  
GACGCCAACGAAACCACAGTG

>RXN02314-downstream  
TAAAGCTCTATGCCGGGAGCATT

>RXN02337-upstream  
CACAAAGTAAATTTGTGTAATTGTGTCGTGATTTGAAGGTTTTGTAAATCTAGTT  
AAATCATGAGGTCATAAGCTTTTCGGGAGGTTGTCAAAGG

>RXN02337  
ATGTCGAAGCTTTACGCGGGGGCAAGGATCAATGCACTGCGCCGAACCCATCAGCTCACC  
CAATCAGCATTTGGCCGACAAGCTTGATCTCTCCACCAGCTATCTCAACCAGTTGGAAAAT  
GACGGACGGCCACTCACTGCCACGGTGCTTCTGCGAGCTGATGAAAGTGTTGATGTTGAG  
GCCAGTTACTTCTCCCCTGACCGGGGTACGGCCACTGCTACCCGACTGGCTGAAACCTTG  
GCGATGAATCAGGGTCCGACGATGTGATGATGATCTTTTAGATTTTCGCGGATCGTTTC  
CCTCAGTTAGCGCAGCATATTATCCAGCCTGCTGAGGTTGATCCCACGCATAGTTCTGCG  
CATGATTTTGTTCGGGATTATTTTGCCACCCACAAAACTACATTGATTCGCTCGATCGC  
CTTGAGAGGAGTTGGCAACTGCCATTGGTCAGCCGGGACTTCGGGTTACTAGGCTCGCG  
CAGTTGCTTGATGCGGAGTACAACATCACGGTGCGTTTCCGGGCGCCGGATATTACTGGC  
CGGAGGCATTTTGATCCCCAATCGCGTCAGATTCTGCTGCGGCAAGATCTCAGCGAGGCG  
CAGCAGTGTTCAGTTGGCGGAGGAATTGACGTTTCTTGCTCATGCAGAGCTCTTGAT  
ACCTTGACCACAGATCAACCGGATCTCCCTTCTGAGGCAGCTATCCGCTGGCTAAGGTG  
GGTCTCTCCCAATATTTGCGGGCTGCTGTTGTATGCCGTACACCCGCTTTTGGAAATC  
GCCCAGGATAAGCACTATGACATCGAGTTGATCTCTGAGGCGTTTGGAGTGCTTTTCGAG  
TCTGCATGCCACCGCTGTCTACTCTGCAGCGTTTCGGGGGCGTCAGGGGTGCCGTTTTC  
TTTGTGCGCTCGGATCGTGCAGGAAATATCTCCAAGCGGCAATCTGCAGCTACGTTCCAC  
TTCTCGCGAACAGACGGCACTTGTCCTTTGTGGGCGCTGCATCGTGCTTTTGAACGTCAG  
GGAACATCACCCGCCAGGTTGCTCGCATGCCGGATGGCCGGACCTATTTGTGGCTCGCA  
CGCGCGGTGAAAGGTCGAACCTCATGGTTTCGGGTATCCTGCTGCGGAATTCGCCATCGGC  
CTGGGCTGCGATATCAGCGAGGCACCGGCTTGGTGTATTCCCAAGGCCTTAATTTGGAT  
CCCGAGTCCGCCGAGAGATCGGCCCTGGTGTGTCGATCTGTCCTCGGGAGAACTGTGTG  
CAGCGTGCATTCCCACCATCGGGTCAAGAATCTATCCGCCAGCCCCGTCCAACCTCTC  
AAC

>RXN02337-downstream  
TAAAAAGGCAGCACTTAAAAAAC

>RXN02339  
CCCACCGACAACCTCTTTTCATATCCTGCACAACGCTATGATCTTCTCACACTTGCCTTT  
GAAGTTAGGATTGGGGACATGGTTCAAATTAATGACATGCTTGCCCCCTCCTCCAGTAAAA

CTTCCGGAAGATCCTGCCCTCGGCGCCGATCCAACCTTGACCTCGACAGCGATTGCGCAT  
CCTGACAGCCCATTGGTGTGGGCGTACCGAGCTGAAAATCTTATCAAATCTGCATCAAAT  
GATGAAGAGAAGATTACGGCCTACGCTTTTTCGCGGCACGGGTTACCACCGCAGTCTCGAT  
CGTCTGCGTGCCAATGGTTGGAAGGGTTGGGGTCTGTCCCTTCTCTCATGAGCCAAAC  
CAGGGAGTGTGCGGGCTATCGCTTCCCTAGCTCTTGCTGCGAAGCTGATTGGTGAGGAC  
AACGAATACGATCGTTGCCGCCAGATGCTCTCTGATGCGGATCCAGAGTCCGTGCGAGTC  
CTACTCGACAAA

>RXN02339-downstream  
TAAACCACCAAAAATAAAACAAT

>RXN02340-upstream  
AAAACGTGTCTAAAAATTAGTTTTTATTGCTGCTGATCACCTCTTGAAGAACTCAACCC  
AAAAGTGCTTCAAGTTATGAGAAAGTGAAATCCAACACCC

>RXN02340  
ATGAAAAAGAGCATCGTTGTATTTGAAGTCGAAGGCGGCTCCGACAAGCACTTCGACGGT  
CACCGTAAAGACACCATGCCTATCGTCAACTCCATAAATGATGCTGGCTGGCAGGCAGAG  
GTTGTGTACTACCGCCAGAGTGGACCGAAGGTCTCTTTGAGTACGTATCTGAAAACCTTC  
GACGGCTACATCTCACGTGTCAACCCAGGCAACATCCCAGGCGGCGAGCGCGGCTACTTT  
GACCTGCTCACCCGCCGTGTCCGAAGCAGGGCTCGTGGGCATGTCCACCCCTGAGGAAATG  
ATGGCATACGGCGCGAAAGATGCGCTGGTCAAGCTATCCCAAACCGACCTGGTGCCATCC  
GACACCGAGCGTACTACGACGTGGAGACCTTCCACAAGGTTTTCCTAACCTCCCTGTCC  
TTCGGTGAGCGCGTGTCAAGCAAAACCGTGGCTCCACCGGCTCCGGCATTTGGCGCGTC  
CAGTTGGTAGACAAGGAACGGCTGCATCCATCGAGCCAGGCACCGCACTGCCATTGGAC  
ACTGAAATCAAGTGCACCGAAGCAGTCGACAACCACTGAAGTCCGCAAGCTCGGCGAG  
TTCATGGATTTCTGTGACCAGTACATCATCGGCGACAACGGCATGCTCGTTGATATGCGT  
TTCATGCCACGCATCGTGAAGGCGAAATCCGCATCCTTCTCGTCGGACCACACCCAGTG  
TTCGTCTGTGCACAAGAAGCCAGCAGAAGGCGGCGACAACCTTCTCCGAACCCGTGTTCTCC  
GGCGCGAAGTACACCTACGACAAGCCAGCAGTGGCAGGAACGATTGACCTCTTCGCA  
GACGCTCGCCAGTCAATCGCAGAAAAGCTCGGCGGCGACAACATCCCATTGATCTGGACC  
GCAGACTTCATGCTCGGCGATGTGCTTGACGGCAAGGACACCTACGTGCTCGGTGAAATC  
AACTGCTCCTGCGTCGGCTTCACCTCCGAGCTGGACATGGGCATCCAGCAGCTTGTGGCA  
TCAGAGGCCATCAAGCGCATCGAGGAATTTCGCGCAGCTTACTGTT

>RXN02340-downstream  
TAAAACTTTGCTTCTCGACGTCT

>RXN02341-upstream  
CGCGACTGGCGGAGAAATTCGTGTTTCGCGATGCTTCGGGCACCGTTTACACCCCTCAACGC  
CGGTGAAATTACGCACCTTCGCCTGCAGTAAGGTGACGGT

>RXN02341  
ATGGGGAAATTCACCTGAGAAACATATTGCAGAGGGAGACCGGATCCACGTGATCTGACA  
TCTCCTTTATCCGCAATGTTGTTCCCCATTTTTGAACTCATTTGTGATTACTGGAATCTGT  
TGGATGGGCATCGGCTTTTTGGATCAGCTTCCAGGAATCGATGGCACCAACCCCGCCGAT  
AGCTTCCCCGAAGGCACCCGCAATCTTCTAGTGGGTGTGTGGGCAGTACTTGCTGCATGG  
CGTTTCGGTCTTCTTTAATAAGGCAACGTGCGACTCCGCGTGATCTTGAGCGACCGCAAA  
CTGCTGGTCCGACGCGCGGGTCTGCGCACCGGGTTCGATTCCATTCCACTGAGCTACATT  
CAGCGAGTCCAACGTGCGCGAAACACCCCTGGTCTTAGGTGTTGGTGGACACCAACCGACCC  
TATGTAATCAACCAGGTTCCCAAGGCTCGAAAAGTGGAAGCGCTGCTCAAAGATCTTACA  
TTTTGG

>RXN02341-downstream  
TGAAGGCGTTATAGTTAGGACTT

>RXN02360-upstream  
AAGTAACTAAAGTTCGAAAGTATTTCCGAACGGTGTGCGCCTCTGCGCATACACTGTATT  
TTTAAAGAAAATTCTTCTCAATTCTAAGGGTGAATATCCA

&gt;RXN02360

ATGCGTGGTGACGTTCAAAAAATAACCAAGGTTTATGACGGCAAGCACCGAACCTTGGA  
 ATCCCGGTTTATCAACGCAATTACGACTGGACTGAAAAGCAATGTTACGCGCTCTTTGAT  
 GACCTCAGCGAAGTGGTCAAAGAAAACACCGTCAACATTTTTTTGGAGCTGTGGTTGGT  
 AAGCCTCAAGGCAGCTGGACCTGGGTTGTTCATCGATGGACAGCAGCGTCTTACAACAATC  
 AGCTTGTTTCATGCTTGCCTGGTACATTCCCTTGCCTGCATCTGAAGTTGAAGAAGGTGAG  
 TTTAATGCTGGCTACAACATTGATCTAGCCACATTGATTGAGGATGACTACCTCCGATCC  
 GGCAATGAGGGAAACCTCAAGTTCAAGCTCAAGCCAGTTAAAAACGATAATGAGGCTTAT  
 CAAAAGCTCTTCGGCCCCAGAATCTGAATTCATAGAGTCTCAAACCTCACTGCTAATTAT  
 CGCTACTTCCGCAATGTCCTTAAGGCAACCGATCTCACCGCAGCTCAACTATGGGAAGCT  
 ATCGAGAAACTCAGGGTCATGTATCTTGACCTTGAGGAATTTGATGATCCGCAGCGAATC  
 TTTGAAAGTCTCAACTCCACGGGATTAGAGCTCAGTGAAGCTGATAAGGTACGCAACTTG  
 GTTCTTATGGATCAGGAGCTCAAACCCAAGAAAAGCTCTATGAGCAGCGTTGGAATCCC  
 ATTTGAAGTCTGCGTGAATTTGATACCGACAATTTTCATTCGCTGGTACTTAACCTCAAA  
 ACCGCGCGCACCCCAAGAAAGCAAGATGTTTATGAGGAATTCAGAAATTCATCCGTAAC  
 TCCAAGCTCCCGGTCGAATTCATCCTCGACGATATGTACGAGTACGCGAAGCTGTACCGA  
 GATCTCTTAGGTGCCACTACTGGGTTTATAGCTGCCGATAGGTGTCTTAAGCGTTTTGTCT  
 CCTGTCTATGGGCGATGTGGTTTTGCTTTTTCTGCTGCTGTTCTCAAAGATGCTAAAGAC  
 GGCATCATCACCGAATCAGACTTCCTCGGAGTTCTAAAAGTTCTGGAATCCTATTTATTC  
 CGCCGTTTTGTCAGTCGGGTTGCTAGTAACGCCTTAAGCAAGATCTTCTCCACTGCTTAT  
 AGCGACATCAAGAAATTCCTGGACTCCAGGGCAAAGTTATAGCTCACTGCTGGCCTACATT  
 CTGAAACGTCGCGATGGTTCCGGGCGTTTTCCCTCCGACAGTGAATTCCTGAGAACTTC  
 GCAACCAAAATTTCTGGAATATTCTAATACGAAAACAGGCGTTACTTATTTGATTGTCTA  
 GAAATGCGCGATTCCTCAATGATGTTCTGTGACATCCAAACAAGTCTGGATGAAGGATCTCTC  
 TCCATTGAACACATCATGCCACGTAGCCTAAACGATCAGTGGAGAGCTGAACCTCGGCCCT  
 GAATATGCTCGAATTCATGAGACTTGGATTAATAGAATTGGTAACCTCACCATCACCGGC  
 TACAACCTCCGCTATTTCAAATTCCTTCTATGAGCGCAAGCGGACGATGGAAAATGGATTT  
 TTGGTATCCCCCTATCGCATCAATAATTTTCATCAAAAAGCAGAAGCATTGGTCTGAAGAA  
 CAGCTAATTGAGCGAACCAGGCTGCTCACTCAAGCAGCGCTGGACTACTGGCCCCCTTCCA  
 AAAGAAACCTTCCAGCCACCACAAGCTGTGCTTCTTACAGAATCCTTAGATAGTGATCTT  
 TCCTTCCGCGGACGCGAAATTGTGCGCTTTGGAATATGAGGACTACAAGGAAACGGTAACG  
 TCCTTGGGCGAGACATGCTCCAGAGCGTTCTAAAAGTCTTGAACCAATCCTTCCGCCAGGAA  
 CTCATAGCTTTGACCAATGAAGAAATCTGCCTGGCAACTTCAAACAACAGTAACAGCAGT  
 CTCCGTGAAATTGACCACGGGCTTTTTGTAGACACTGGCTCTAGTACGAGTGTAAGATT  
 GGCTTCTCTCCGACAGTTTTTTACTCAACTGGGGCTAGAGCAGGAAGCATTGGTTTTTACC  
 CTTTCGACCACTGGCAAATGATGTAGAACCCCGAGATGATGAACCTCGAGGTAGAGGTAGAA  
 AAGAAATATTCGATTTGACTAAATTCATCCCACAGTTAGAAGAAGCTGAGAATCTCGAG  
 GGGGCGGATACAGAGGTTATTCCTCTCTCTCAAAGCTCAAGGAACAACCTGACAGCCTTT  
 AGCCCCGAGAATCCTCAAGCAGCCCTAGGGGGCTACCTGTTCCAGAATTCTTCAAACAA  
 AATGTGATTGAACCAACTAAGCGCAGAGCACATCCTTGCTGTACTCACTCAACACTTTAAT  
 ATCGCATCCATGATGGGTGATGACTATTTGCTCGAAGAGCTCAGGTCAGGCCGCTTAAGG  
 GAATTACTGCAGCGTTTAGAGGAATTGGATAGC

&gt;RXN02360-downstream

TAATAGCCGTAGTCGGTGGTCAA

&gt;RXN02361-upstream

TAGAGGAATTGGATAGCTAATAGCCGTAGTCGGTGGTCAAACCTTTGACCACCGGACTCCC  
 CTTTAAGCACAACTCTCTAGCTTTTATTTAGGCTTGGAGTT

&gt;RXN02361

ATGGAACCTCTCTCCCACTTGCTTGCTCTTGATCCTGCCTCCCCCTCGTTTGACTGTTTAT  
 AACGAGTCCACGGGTGCGCGTTTGGATTTCTCCGCCATCACTCTTGATAACTGGGCGTCC  
 AAGGTTGGCAATATGCTCCTTGAGGAATTGGATCTGGAGGAAGGCTCGCTCATCACTATT  
 GATTTGCCGGTGAGCTGGCAGGCCGCAATGATTATGCTCGGCGCTTTAGCAACTAGTGTT  
 GAGGTCTCTTTTGATGATCCCGAGGCAGATGCCATCTTACCTCCCTCGATAGATTTTCC  
 CACTACAAGGGCCATAGTGATGTGCTGATTGTTCAGCGAGGATCCTTTTGGTCGTGGAGTT  
 GTTGAAGGTGGCGGTGAACTGCCTAATGGTGCCATCGATTTTGGCCCCACAGTGCGTTTTT  
 TATGGCGATCAATCTTCCAGCCTACCCGCACATTGCCGGAATCATCCAGCATCTGTAT  
 GTTCCGTTTGGCGCCAGAGTTCTTGCAACTGGTTGGTCAGATATCGAGTCTTCAATCAC

CAGGTTTTAGAACCACTCGCAGTGGGTGGCTCTGCAGTAATTGTGACCGGACTGGCTGAT  
ATTGAGCGTTTAAACCAGATTGCAACCAATGAGAAGACAACCCACCGTATC

>RXN02361-downstream  
TAGGCAAATTTTCGGTTACTACTA

>RXN02367-upstream  
GGCACTTGAATCCGGACGCTAAGTTGTTGATACATCAACTTATTTCTTGGCTATACCTGA  
GGTCACGTTTCCTCAGCTCAGGAGAAGTTTCGGAGAAGTCC

>RXN02367  
ATGTCAAACGCAGAAATTAATCCCGTTGAATATGAAATCAACAACCACGCCCCCTGGTACC  
GCGCTAAACCCACAGTGCAGAACGGCGCCAAACGTAGAAATCATCACCTCCCGTGAAGTC  
CCCCTCGGCGGACCACGCGCCATGACCGTGCACCGCACACTCCCCAACGCCAGCGCTCC  
CTCATCGGTGCCTGGTGTTTTGTGGATCATTACGGCCCCGATGATGTCTCACTAACCAGGT  
GGCATGGATATGGCCTCCCAACCGCACACCGGATTGCAAACAGTCACGTGGCTTTTTTGAA  
GGCGAAGTCACCCACCATGATTCCGGCGGAAATCACGCAGTCGTGCTTCCTGGCGAAGTC  
AACCTCATGACCGCCGGCGCAGGCATCTGTACACCGAAGTTTCGCCACCTCCACCACG  
ATTCTGCATGGTCTGCAGTTGTGGACAGTTCTTCCCGACAAAGACCGCGAAGGACCACGC  
CGCTTTGATCACTACGCTCCAGAAGAAATCACACTCGAAGGCGGAAGTGCACGCGTTTTTC  
CTAGGTTTCGCTATTTGGTCAAACCTCCCCTGTTTCATACGTTTACTGGCTCTTCCTGTTTT  
AGAGTGCAT

>RXN02367-downstream  
TGATCTTATGGACCAACTGCCCT

RXN02368-upstream  
CTTAGGTCAAGCTTGCATTTATTTGGCTAGTGTGCGAAATCATGGGAGATTTAGCAAAGCA  
CATGGGCAGTGAACCACCAGCATGGTGGAAAGTTTTTACCG

>RXN02368  
ATGATTGTCTCGCTGGAGCCACTCGAGTTACCTATGAAGTAGAACCTTGGCTGGCGATC  
CCATTATTCATTTTGGCTTTTGCATCGATATTGATCCCATTCCCGATCTCTAAGACAAAA  
GGACTCCGTGATATCGATGCCCTGGAAAATCCACACCACGCAAGGCGATAAAAAGCGTGCC  
ATCCGCCAACTGATCATTCGGGCTACGGCTTTGGCCATCGACATCATTTGGGCTGCCGACA  
TTATTTAATGCCCCCTCCCCTTGCTTCCGCTGCACCTTTTGGCGGTGTTTACGGCGCTTCC  
CTAGCTTGGGCTGCGTACAGAGCTGATCAGCTTCCACGCATTCGAACGAAGGAACGCCTC  
GCAGAACTTTCACAAAATGCATCTCTGGATGATGTGCGCTCAGATGACTTAGATGTTCTA  
GAGCAGCCGGAATCCCGTGAATTAGTGCGCTGTCTGCTTGCCACGGTGCGATGGATGGC  
ACTCGGGTGATGGCCAGACAGGTGCGCGAGTACTGGATACCGAGGTAGACGAAGTACAT  
CAGGTAGCAGCTCACTAGAACAGCATGGTTTGGTTAGTCGCTCCACCATCATGCCGGGT  
GGGGATCCAGGAAAAGTATTCATCGAAGTTTCCCTGAAAGGGATCTCAGCCATCAAGGCA  
CTTGAATCCGGACGC

>RXN02368-downstream  
TAAGTTGTTGATACATCAACTTA

RXN02381-upstream  
AAGTTTGAAGAAGTAATCAAGCTCCCCTGTGAGGACTCGTTGTAGTCTTTTATTTAGTTA  
ATAAAAAGATTTTCATACCAACTTGTGAGCAGGGGAGCTTTC

>RXN02381  
ATGTCTGTACAAACTTCCGTCGGTTTCTTGCTGGCATAGCGGTTCATCGCGCGTGTGTT  
GCTGCGACTCCAACAGCTCAGGCACAAAGCAGTGGCTCTTCTGGATCCTCTGGTTCTTCA  
GCGGGATCTAGCGGGCTGTGGGATTTACTTTTTCCAGAATCCCATGAGTCTTTTATCGAG  
CGGCTTCTTGATCCTTTGGATGACAGCCATATATCTATTACCCCTGACCTCACCCAGAC  
CTGTATGAAGAGGTGTTTGTATCCACCGCAAATTGGTGAATGCCAGCCGTTGTTGCTGTG  
GTCGCACGAGGCAGTGAACAAAACCTTCAAATCCGACCCGCGGATACAGCGAGGAATCT  
CCATGGACATCCAATGGATTTGAGGAAAAAACTTTCGTAGTTTCTTTGGCCGAATGGAA

AAACACTACCGTGAATCGACTGGCGAGTCGTTGATGAAAGACGTCTACGTGATGGGTCTG  
AATAATATCGAATACCCCTGCTTCTTTGCCACTGTCTTCGGAGGGAAGCAGCGCCATTGAA  
TTGGGCACTTCCATTTCTAGTGGTCGCGACAATGTCAATCAGCGCGATTGATCGCTTTGAA  
TCAGCGACAGGGTGCACGCCGAAGTACCTGTTGGCGGGTATTCTCAAGGTGTCCTCATC  
GTTGATGGCTATGAAGAGGAGTTGATTGCGAGGGATCAGTACCTCGGCACCCTGCACATC  
CGGAATCCAGCGCAACAAGTTGATGATCCAACACTTGTGGGCATGAAGTAACCACGGGA  
GGCTTGGCTAGTTCCGTTGGAGCCCGTCGAGGACAATCCTTTCAAGGTGAGCTACTGCCTG  
CCTGGAGACATCGTGTGCGATCGTTCTTTTGAACAGTTCTCTGCTGCGGGATCCTCTATA  
GCAGCTGCGCAATTGAGCACCAGGAAATATCCGTCAGGTGAGTACACGTGCAATACTTC  
GTTACCAACCAACCGTGGGATGAGCAGATTTTTGACGAAGTCGCATCGTGGATTGAAGCT  
GCC

>RXN02381-downstream  
TAAAAACTCGCGAGGACGCATGC

>RXN02383-upstream  
GGGCAACAATGTGGAACCGCCAGTGGTATCTTGACGGCTGGAACATGGGTGTTACGCA  
GTAAAGAAGATGGCAATAAAAATGTGGAGGAGTAAAGGCG

>RXN02383  
ATGCCAGTTCGGGTAATTGTTGATTTCCTCCGCATGCTTGCCAACGCATGTGGCCGAGGAC  
CTCGACATCACGGTGATTAACTTGCACGTGATGAATAACGGTGAAGAACGCAGTACATCC  
GGGTTGTCGTCGTTGGAACCTGCAGCAAGTTACGCCCCGCCAGCTTGAACGCGGTGGCGAT  
GACGGTGTGCTTGCGCTGCATATTTCTAAAGAGCTCTCGTCCACGTGGTCCGAGCGGTG  
ACAGCAGCCGCTGTGTTTGTATGATGATTCTGTGCGCGTGGTGGATACCAGTTTCGCTCGGT  
ATGGCTGTGGGTGCTGCGCGCATGGCTGCTGCCCCCATGGCTAAAGATGGCGCGTCTTTG  
CAGGAATGCTACGACATCGCGGTGGATACCTTGAAGCGTTCAGAAACCTGGATCTACCTG  
CACCGCATTGATGAAATCTGGAAGTCGGGACGGATTTCACCTGCAACCGCCATGGTGTCA  
ACGGCTCTGGCAACCCGCCCATCATGCGTTTCAACGGTGGTTCGCATGGAGATCGCCGCT  
AAGACCCCGACCCAATCTAAAGCGTTTGCCAAATTTGGTGAATTAGCCCAGATCAGGGCA  
GATGGTGAACCCGTATTTCATTGCGATTGGCCAAAAC

>RXN02387-upstream  
GCTAGCCCCGATTTCGCTTCAGGTCACCACCTTGAAGGCCAGCGAAATTACTCAGGGTGAA  
TTGTTGGATGCGTTAAGCCCATCCTTGTTTGCTGAAGACC

>RXN02387  
GTGTGGTGGTGCTTACCAACATGGATCAAAGCAGGCCAAGATGCTGTAGATCTAGCCTTA  
TCCGCAGCAGTTGATCCCAGCCCTGGTACCTACTTGATCGTCATGCACTCTGGCGGTGGA  
CGCTCTAAGTCGATGGTGAAGAAGCTGGAAAAAGTCGCGGTGGTGCACGATGCCGCAAAG  
CTGAAAGACCGGGATCGTCCAGGTTGGGTAAAACAAGAGTTCAAAAACCACAAAGTCCAG  
GTCACCCCAGATGTCATTCATGCTCTTTTAGAGGGCGTGGGTTCAGATCTTAGAGAGCTG  
GCGTCCGCCGTATCCCAATTGGTTGAGGACACCCAAGGCAACGTGACGGTGGAAAAAGTC  
CGTGCCATATTACGTGGGTGTTGCTGAGGTATCGGGTTTCGACATCGCCGATTCTGCATGC  
GCCGTTCAAATGTCAAAGCCGTGGCCAGCACCAGACGTGCCCTTCAATTGGGTACCAGC  
CCGTTGCAATTGGCAGCTGCGTTGAGTATGAAAGTTGGCCAGATCGCCAGGCTGTATTCC  
ACCAGGGGACGCATCAACGGTTTTGAGCTGGCCAAAGAATTGGGCATGCCGCCGTTCGTG  
GTGGAGAAGACTGCGAAAGTGGCCCCGAAACTGGTTCGGGAGATGCGGTGAGGAGGCGGTG  
ATTTTGTATGGCCGATCTGGATGCCGCTGTAAAGGACAAAGTGGCGATCCTGAATTGCG  
ATCGAATCTGCCGTGAGAAGAGTTGCAGAGCTGGCGAGGCGG

>RXN02387-downstream  
TAACGCTGAACGGCGGCGGGTAA

>RXN02398-upstream  
GTGTCCAATGAATGCGTTCAATAAATGCCCTCTTTAAGCATATTCTCTGAGTGCATTTCAT  
TACAGGCGTTAATTAAATGCGTTCATAGAAGAACTTGAAA



>RXN02398

GTGGTTGAAGTGAAGAAGCGTAATCTCCTCGTAGCTCCCCCTCACTGCTTCCCTGGTGTTCT  
TGTAACCTTGGCTGTTGTCAGCAAACGCCGTTGAAGTTGAGGCCGAATCACCAGTTGTCATC  
AATGAAGTTGAATCCAACAGCGACCCAGTTGGTGACTGGGTGGAGTTGGCTAACACCGAC  
AACAACAACCTCCATCGACATTTCCGGTTGGTCTTAGTCGATGACAAGGAAGACCTGGAA  
AATGCCCTCGTCCCTTCCTGAAGGCACTGAGATTGAGTCCGGTGGATACCTTTGTTATCTAC  
ACCGACTCTGCTGATTACGTGCCACCAACAACACCTTTGGTGGCCAGGAATACTTCGGC  
CTCGGCAAAGATGACACTGTTACTCTGCGCAACGCTGAAGGCGAAGTAGTTGCTACCTAT  
TCCTGGAAGGATCTGGGCGAGCAGCAGAAAACACCTATGGTCGCATCCCAGATATGACT  
GGTGATTTTCGCAAACACCGGCGTTCCAACCCCAGGTGCAAAGAATGTTGCTGCTGAAGGC  
TCCGGCGAAGAAGAAGGCGTTGTTGCAAACGCCCGAGCTTCCATTCCACAACGTTGAAATC  
ACCCCAATTCACCTCGGTGGAGATTTACCGGTGAAGATATGTCCGGCGTTGATTTTCGAT  
GCAAACAGCACCAGCATGGATCGCCAACAATGACATTGGAAGATCTACTCCCTCGCCAC  
GACATAGCTAACAACACCTACAAGCTGACTGGCGAATGGGAAACCGGCTACCCAGAAGGC  
GGCGGAGAGCCAGACGCTGAAGGCATCGTCGCAGCTACCAACGGTGACATCTACCTGTCC  
ACCGAGCGCAACAACGCTGACAAGAAGCTCTCTCGCCCATCCATCCTGCGTTTTGCTACC  
CCAACCTGGCAAGACTGGCGTACAAAACGCAGTTTCAGGAATGGGACCTGTCTGAGTTTCGTC  
GGCGACATTCAGCCCAATGGTGGTCTTGAGGCAATCGCGCAGCTCGAGGACAACATCTTC  
GTTGTTCGGTGTGCAAGAGACAGGTGATGTCATCGTTGTTGATCTTTCCGCTGACCAGCCA  
GTTCTGGTTCAAAGGTACGAATCTTCCTTCGACGGTGTCATGTCGCTTGATTACAACGCA  
GCAACCAAGCAGCTCAGCGTTGTGTGCGACGAAGCATGTGACGGCTTGTCTGAAATCCTC  
GAATGGGATGGCGAGAAGCTGTACAAGTCCGACGACAAGATCTACGAGCGTCCAGCAAAC  
CTGGGCAACTGGGCTAACGAAGGCTTCGGCACCTACACCTCAGAGCTTAAATGCGAGAAG  
GGCAACACCGTTTCTGTACACGCTACCTCTGGGCTGACGATGCAGCAACCAACGAAGGC  
ACCTCCCTCAACTCCGCACAGGTATCAACGGAGATTGCGGCGACGTCAACATCCCTGGA  
GAGTCTCTTCCGACAATTCTCTCTGACTTTGCAACCGGCAGCATCGCAGGCGCCTTT  
GCAACCGCAGTGCTCGCAGTCGTAGGCATTGCGGGCGCACTGGGTGGATTCTTCCAGCAG  
ATCCTCGCAGCGTTCCAGCATTCGAGCAGGTTCATCCGTTTC

>RXN02398-downstream

TAAACCCACTGCTTGAAACACTT

>RXN02406-upstream

CACTCTGATAGCCTTTTCTCTGAAATTGTACCGAGCATTTGATTTTGTTCCTTATCAAT  
GCTGGTTTGGTGACAAAACTCGGCGGAAGGACCACCGA

>RXN02406

ATGGAACCCCTTGCAGCACAAGCGCGCACCCCTGCTAGAAAAATGGGGCGTCGCGCCGACG  
CACGCATCTTTCGTGCAATCCATTGCAAAGGCCATCCCGATTCTGTGATCCTGCTGACG  
CTGATTGTACCCGTGAATGGAATTTCAAGCGGAAATCCGGTCCAGCCACCAGCACTGGAA  
CAGGTACGGACCGATGTAGTGAACAAGATCAACTACGAACGCAACCTAAAGGGCCTCGTC  
TCGATCAGCCCGGAGCTTGAATTACACACGGCAGCCCAAACAATTGCGCAGCGAAATGCA  
GACTCAGATTCCGAAGAAAAAGTACCGGATCCAGAGGGCAACCTGGTGGTTCTGCAACAG  
AATCTGCCCCTATGCAAATGCCAACGCCGATACCATCGTTGATCGGTTCTTAAACTCTCCT  
GATCATGTCAAATCTGCTTGCAAACGATTATGAAGCCATCGGAGTTGGTGTGGCTTAC  
AAGGGTGATCATGCGTGGATAGTGGTGGAGTTCACGTGTAGCTCCCGCTGATTCCGTAGAA  
TCAACAGAG

>RXN02406-downstream

TGAATACCAATCCGTCTGAATTC

>RXN02407-upstream

GGATAAAAATTTGGATGACATATCACCTAAGCTTGCAATTTCTACTGGAATAGCGCGACT  
ACTCTGCACCAACGCATAGTTGTTGACTAGGCTATTTGTC

>RXN02407

ATGAATAGGCAAAACCAACTTCACTACCCGCAGGAAGTGAAGGCAGTGGAAGTGTGGAA  
TCAAGCTTGAACATGTGTCACCTTCTGCACCGCTTGCCACGCCAGATGTTGAGCTTGAT  
GTGCACACGTTGTGAGCGGAAAACCTGCCTTGGTTGTGCATCGTGTGGGATGATCCGGTC

AATTTGATGAGCTATGTCACCTACGTTTTTCAGACTGTGTTGGGCTTCAGTAAGAAGAGG  
GCCACTGAGCTGATGATGCAGGTGCACACCGAAGGTAAAGCCGTGGTGAGTTCGGCGAG  
AAGGACAAAGTGGAGGGTGATGTGAAGAACTCCACACCGCAGGGCTGTGGGCGACAATG  
CAGCAGGCAGGG

>RXN02407-downstream  
TAGGGGAGAATTTTCATGCAGCA

>RXN02408-upstream  
GTGATGTACGCGGCGGGGAAGCCGCCGAGGAAGACCGCGAAAACCTCGTGAGTGCGCTTG  
CCTACAATCAAGAGTCCTTGCTGGAAGCGATGATGAATTA

>RXN02408  
ATGCTTATCGACGTCGCGGGCTTCCTTTTAGGCCACGTCACGAAGGGGGATACGGGTGTC  
TCAGTGGTCATTGCACCTAACGGTGCATTTGCGGGCGTCGATGTCCGTGGGGGAGGCCCA  
GGCACCAGGGAAACCGACCTTCTAGAACCACACAATTCTGTGCAGCAAGCACATGCCGTG  
GTGTTGTGTGGCGGTTTCGGCGTTTCGGGTTGGCTGCTGCCGATGGAGTGATGACAGCCCTA  
GAAAACCGCGGTATTGGTTTCCCTGTCCGTCCCGAAGGGCCTATCGTGCCAATCGTTCCA  
GGCGCTGTGATTTTGTGATTGTTGGTGGGCGATCCCCAAAACAGGCCACGGCAGCTGAT  
GGGGAACAAGCAGTTGAAAACGCTTTCGCTGGTACACACAACGGTTCGGGCAGCGTCGGT  
GCAGGAACGGGTGCTACAGCAGGTTCGGCTGCGTGCGGCTTTTGGCCAAAGCTCGCGCCGG  
GTCGGAAGTACACCATCGCGGCAGGGGTGCTGGCGAATCCTGTTGGGGAAGTCGTGGAC  
CTAACAACCTGGAGCTTGTGTTGGTAGGCCCGAAGTGATGGGGGTGGGCGTCGATAAGCTA  
AAAAGCGCGGCAGAGACGCTGAACACGACCATCGGCGTCGTGGCAACTGACGCGCCGGTG  
ACAAAAGCCCCAAGCGAAGCGCTTGGCGCTGGTGGCCCATGATGGTTTGGCGAGGGCAGTG  
CGGCCGTCGCATTACCCGATGGACGGTGACACATTTTTCGCCATGTCATCGGGTGATGGT  
AGTGGCGTTACCCCGTTGAGCTGGCGGAATTGTGCGCTCATGCTGCAGATTGCGTACAG  
GACGCTATCATCGACGCCATACTTACCGCGAGTCCGGGACTCGGGCTCAAAGCTTCAGG  
GAACTTTTACCA

>RXN02408-downstream  
TGAGTTACAACAGCCCGTATAAC

>RXN02409-upstream  
GAGTTCTGGCGAGAAGGACAAAGTGGAGGGTGATGTGAAGAACTCCACACCGCAGGGCT  
GTGGGCGACAATGCAGCAGGCAGGGTAGGGGAGAATTTTC

>RXN02409  
ATGCAGCAGTGGAAGAAGAAAAAGGGCTGATGCGCCAGGCTCGTTACGCGGTGGTTTTT  
GAGCCGATGGAGCGGGAAGTGTGGGTGATTTGTCAGCTGCGGTGAGTGAGGCGTTGATT  
CAGCGTGACAGTCTGTGCCGAAGGATCCTCTGGCAGAGATGACCGGCATGACAAGTGGA  
CACAAAGAAGCACCAACCGATCCGGCGCTTGCAGCTTGTCTCCCTGATTTTCAGCACGAG  
GGCGATGAGGAATACGACGGCGATAATTCTTTCTCCGTTCATCCATGAAGGCGACATC  
ACCCGAGCAAACTGGAAAATCTGCGCGTGATTAACGATGCGCTGGGACCCGACGGAAT  
GTTGCGGTCACCGCTCTGAGGAGGAAGCGCACGCTTGGTTGGCTGCGCTCAATGACATC  
CGCCTGTACGTTGCCCTCCGGTGATGTACGCGGCGGGGAAGCCGCCGAGGAAGACCGCGAA  
AACCTCGTGAGTGCGTTGCCTACAATCAAGAGTCCCTTGCTGGAAGCGATGATGAAT

>RXN02409-downstream  
TAATGCTTATCGACGTCGCGGGC

>RXN02428-upstream  
CGAAAGATATGCATAAAGTGATGATGAAATAGCTTTGTTCGAAAGGTTTGCTCCCGGTGCA  
TTCAGTTAGCGTGAAGGTGCCATCATCAAAAGGGTTGATG

>RXN02428  
ATGGCCGCGACGTTAGATCTTCCAGATACAGATCCCATTGCCATGCAATGTTTGCCAC  
TGTTTCACCGGCTCACGGTTCACGCCAGCCGCCGCGCGAGTCAGTAAACACTCGCAGAA

TCCGGCGTCGCCTGCCTGCGTTTCGATTTCCCAGGACTGAGCCAATCAGAAGGTGACTTC  
TCCAAAACCACTTCAACTCCAAATGTGGACGATATCGTGGCGGCCTCGCAGTGGTTGACG  
GAACACTACTCCGCTCCACAGTTGCTCATTTGGACACTCCTTGGGTGGTGCAGCATCACTG  
AAAGCTGCCACCAAAATCTCTGCCCTCAAAGCAGTAGCAACGATAGGTGCACCTTTTGAT  
CCTGCGCAGCAGTCTGCACTTTGCTGATCGCATATGTGATGTAGATGATCAAGGTGCT  
GTCACCTGTCAGCTCGGAGGCCGGGATGTCACCATTTCCCGCGAATTCCCTCGAAGACCTT  
GCAGAGGTCAACCCCGAAGATCACCTCCGCAGGCTCCGCAAACCACTGCTTTTACTGTCAT  
TCCCCACCGACCAAAACCGTCGGCGTGGACAACGCGCAGCTCATCTCAGAGTCACTCGC  
TACCCTAAATCCTTGATGACTTTGGACAAGGCAGATCACCTGCTCACCAAAGATGGCACC  
GCACAGCGTGCAGCCCGGATCATCGCGAATCGGGTCGAGCCCTACCTGGTTCCAGAAAAC  
GTCTGTGAGGATCTTCCGGAGTTTGTGCGCCGAAGCCTCAACCATCAAAGCCAGCAAATAC  
GGCGCAGCCATCCGCACCGGTGGTCACAATTTTCATCACCGACCGCGACAAATCCCAGGGT  
GGCAAAAACCTCGGCTTCACCCCTACTTCCCTGCTGGTTTCCGCGCTTGCTGCTGCAAA  
TCTCAAACGATCAAACAAGCAGCCATCGACAACCGCATCAAAGGCCCTGACGATGTCAA  
GTGACGATCTCCAGGAACAATCAGCCGACCACGGCCAGATCAAACCTCCGCCGAAAGATC  
TCTTTGATCGGCAACCTCAGCGATGCTGACAGTGCTTCACTTCGGGCGCGCATCTAATTC  
TGCTCGATTACCCAACCTGCTCGCGCAGGGAATCGTCATCGACGACGAGGTGAAC

>RXN02428-downstream  
TAGCGTGATTTTGAGTTGGGTA

RXN02454-upstream  
GGCAAGCGCTCCCTTAAGCCCGCGTACCGGCTACCCCGAGGCACGTAATGAGTAGGGCA  
GTTCTAGCCATAATCAGCAGAAAAGGTGGAGTGATTGCGC

>RXN02454  
ATGAAAGAGTCCATGAGCATCACCTCGTCGACGTACGCGTCGGCACTGCTGACACTGCCC  
TGGGGTACACCCCTGGAACAGTGGCCCGATAATCTCATCGCCGCGCTGCCAGGGGTATT  
TCCCGGCACATCGTGCCTTTTCGTGGGGATCAACCGTGGCATCGTCGCGGTCAAAGAAATT  
GGTGCGCGTACCGCCACCAAGAGTACAAGATGCTGCGTGAATGTCAGCGCCTTGGTGCC  
CCCAGTGTCGCCCCGTAGCCGTGATCACCGGACGCCATCCGGCAGAGGAAGACTACGGG  
GAGCTCACCGCAGCTTTGGTGACCGAGCACTTGGAGTTTCCCTGCCCTATCGCGAGATC  
TTTTCTCGGCACCTCACGGTCGTGGAATCGGAGAAGCTCATCCGCGCCCTGTCCGTGCTG  
TTGGTGCGGATGCATCTGCTCAACTTCTACTGGGGAGATGTGTCACTGTCTAATACTCTC  
TTTCGTGCGGATGCTGAAACCTATTCCGCCTATCTCGTCGATGCCGAAACCGGGGAGTTC  
CAGCCCAACCTCTCTGAATCACGCAGGCTTTACGACGTCGACATCGCCCGCGTCAACATC  
ATTGGCGAATCATGGACCTACAGGCGGGTGAATGCCTAGATAAGTCCATCGATGTCATC  
GCCCTAGGAGGCCCTGTGTCGAAAGCTCTTATCTTGAATTGTGGACGGAGCTCACCGCGGAG  
GAATCCGTCGATGCCAGTGAATATTGGCGCCTCTCTGAGAGAATTGACCGGCTCAATCAA  
CTGGGCTTTGACGTAGGGGAGCTCAAGGTACGAAGGACGATTCGCGGCAGGTGTGCGC  
ATTCGCCCTGTAGTGGTGGATCCGGGCCACTATCGTGCAGAGCTATTGAGCTTAACCGGG  
CTGAGCGTCGAGGAACACCGGCCAACGCCTATTGGGCTCGATCCAGGCCTATCAGGCC  
GTGCAATGCGGACCGCATGTAGGTCTTACCCAAGCCGCGCATCTCTGGATGACGAATGAA  
TACGAACCGACTATCGCCGCCGTCCCCGTGGAGATGTTAGACAAGCTGGAGCCAGACAA  
ATCTTCCACGAAATCGTCGACACCGCTGGTTCTCGCCCAAGAAAGGGGAGGGGCTGTC  
ACCTTCCAGAGGCCACGGCATCTTATCTTGAATCCGTGCTTCCGGCCCGCCGCGACGAG  
GCTCGCCTCCTCAGCACAACCCCTCAGACGAAGACTTGTCA

>RXN02454-downstream  
TAACCTCTCGCGTGCCCCAACGG

>RXN02457-upstream  
CTGTAAAGCCACGTGAGCTGTTGCTTAGACTTTACTCTACCCCGCGTGTCCACCACATC  
AGTTAGAACATATGTACCACTTCAAATCTAGGGGGAAACA

>RXN02457  
ATGTTCTACTTCACCGTCAATAATCCGCAGGATCCTTTAAGCACCGAAATTGTTGAGACT  
AATCGCCGTGACCTCGCATTTTGGCATCGATTACGCCCCAAAGATGACGATGATTAGCC  
ACAGCCATCAACAAAATATGCGTGCGCACAGGCTTATCCCGCAAACCTGATCGCCGCTTGT

TTATTTAGCATCTGCTTCCTGCCGTACTTACCCAACCTCCACAACTCGTCGAAAAGCTT  
GGTCATCTCGACATGGCGCGCATCAACGCGATCACTAAAGCTGGCGAAAAAGTGCCAAGC  
GAGAAGAGAGAGCTTTTCGACGCCTACCTCGTCGATTACCTGACGCCTCGAGCGGAGGCT  
CAGTGCTTGCCCCAGGCAAGCTCAATTTCCGCAATGATGCGGAAATTTATCGCACAAACAC  
TGCCCCGACGACAAGGCCTCCTCAGCCACCAATGATGGCTCCATCCGCTACCGCAGAAAC  
AACAAAGGCGGGATCAGTATCACCGTCGATGCCACCGCCAGCGAAGTAACAGAAATCAAA  
GCTGCCCTGGAACAAATGTCCAAAGATAAGGACTGCACACCAGGCACTTCCCTACTCCAC  
ATCATTCGTGGCCTGCCGACAAAAGTCGTACTCAACACCTACGGCACCAAAGACAGCCCT  
GAATACTTAGAAGGAGGAACCTGGCTGTCAAAGGAACAGTCTGAGTTCTGGAAAACCCGA  
ACCACGTCCAGTCGGGATATGGACGCCGCCACTTCTCTTACACCACCGCCTACGCTCCA  
ACCCGAGAAATGCGCGTCTACATCAAAGGTCTACGCACCACCTGTAGCGTCCCTGGCTGC  
AGTGTAGCGGTGCGAAAACCTGCCAACTGGACCACATCATCCCCTGGGGTGAAGGAGGGCCG  
ACAACACCGTGGAATATTCATCCCCCTGTGTGTCTTCCACCACATCCAGAAGACTGAAGGG  
AGGCTCCAGTGCTATCCACTACCGGACGGCACCCTTATTCCTAGTGGATGGAATACCG  
GTGTCTCCATCCCCGACGGGCCTTTATCTAAATCGAATAAAACCTGGGGGACAAAGTTC  
GGCAAATACATGGAGCGTCGAATCGCCGCC

>RXN02457-downstream  
TAATCCAGCAAGCCAGCGTGATC

>RXN02460-upstream  
GCGCCGTCGAAGCCGGACTCGTAGGCGTCTACTACCAGCAATTTGACCGTGCAGTCGTGCG  
AAATCGTCGGACTGTTCCGGGCTAGAAGGAGAATTCTAATC

>RXN02460  
TTGCGCGTCTACATCCCAGCAACGTTTTTCCACACTCCGCGGACTCAATGAATCCCGCGTC  
ATCACAGCAGCTCCGGATACGGTTTTCGCAGTCACCCCAGCACTCCTTGACTTCTACACC  
GACCGTGACGAAGAAGAAATCGCACATGCAGCCTTCCAAGACGCCGAGAAAGCCTCCATC  
CGACTCCTCGCAATCGGCGACGAAGAAACATTTCCCTACCGCAGAGTCGTGCTCTCAGTA  
GATGTTGACGACTCCGTGGTGACCTACCAGCCTGAAAACGGCGAATCCGTAGTCAAACCTC  
AGCCCAGCGCACATCAACCTCGACGACGTGGCAGCAATCCACATCGACGTTGAAGCCTCC  
GAAGCAGACACCAAAAAAGCTATCGAAGTCTACGACGAATCCGACCTCGGCGAAGAAGAC  
GCCGAATCACCGTCGGGAGACGCCCAAGACAACCTTCATGGCCTGGTACGACCCAGAAGAG  
CTCCCCCTTCCTAGTCGAGCTCCTC

>RXN02460-downstream  
TAGATCACATATCCACGCGTGC

>RXN02464-upstream  
ACTCGACATCCCAGAAGGTGTACCCGAACGAGTCGGACCACCAACCAAAGTTCTAGGCGG  
AACAGCCCCACGACCACCACGCCGCACCCGGAATAACTT

>RXN02464  
ATGGCAGCAAAGCTTCAACCACTCAAACGCACCAAAAAAGACCTCATCGCAACCGGTGTC  
ATCACAGCACTAGCAGTCATTGGCGTCGGCACGGTCTGGGCAACCGCACCAATACGAGGA  
TCTGAACTCACCCCCGCCGACGAACCATTCATTGGCTCAACCACACTGGACGCCATCCCC  
GAAACACTCAGCGAACATTGGCGAGCCACCGACACCTTAACAAACCACAAACCCCTCATC  
ACCGGCGGAGTCATCTTACCGCGGACGGCAACACCATTAAAGACCTACACCCCGACGGC  
GCCCTCCTGTGGAGCTACGAACGCGACAAAGAACTCTGCAGCCTCTCCGTAGGATTCGAC  
GCCGCCGTGCGCACCTACAAAACCGGAATCGGATGTGGCGACGTCACCGCCATCAACGCC  
AACGACGGCCAATACCAAGCAACACGCGAGCGAATCTCCAGCGACCACGTAGCACCGGATC  
TCCTCGAACGATCGGATCGGTGTTCTCGGGACAGAACGCTTGGAGCTTTGGCGATCCGAT  
CTGGTGCGAACCATCGAATACGGCGATGTGGAAGCTCCTCAAGAATCTGGGCAACAACCA  
CATCCGGAATGCTCGATTACGTCCGCCATGACACGCAAGATCTATTGGCTATCACCGAG  
GATTGCCCTGACGGATCTTCTTACTTGAGGTTTCATGGGCACAACACCAGACGATTCCCGA  
ACTCCTGAAATCACCCAAGACATAGAAATAACCGATGGCAGGATCGTTGCCATCGGTCAA  
TCAGTGGCTGCGGTGTATACAAACGATCCTTCGCCTCGAATCGTCTCCTACAACGATGAT  
GGTGAACATAGTTGGAGAACAAGCAGTCGATGAGGTTGAGTTCCCGGATCCGCCGTTTCAA  
AGCGCAGCCGCTGATCTTCCACACCATATGAGTTGGTTCAACGGAGACAGCCTCGTACTG  
TTCCTCTCCCACTCAGCTCAATGTACGACAAAGCTTCAATGATGCTTTAGGAACCGGCATT

GCGTTGAACGGAAGTCTCCTCTACCCACCGCTGAGGGCATCACGGTAGCTAATTGGGAC  
ACCGGAGAGGTGCAGCGCACCATTCCGGTGGACCGTGCGGGCTACGACGGTGAAGTTGCG  
CTCGGCGTTGTAGGGCAGGTGATCGTCGAAAAGCGTGGCTCTGAGATCGTTGCTCTAGGC

>RXN02464-downstream  
TAGATCTCGTTGTTAGCCCAAAG

>RXN02465-upstream  
CTGGTGCAATATAAAAGTTAACCAACCAGTCATCCAATATGTCGCCCTAAGTAGTCTTCCC  
AAAGTTAACAGCTAGAATCATGGCCGTGACTTCTCCGAAC

>RXN02465  
ATGCCTGCATCAATTCGCTGGGGCGGCATCGTCGCCCTCATTCATCCACCATCGGATTC  
GGTTACGCCTTTTTCCTTATTTACAGGGAAGCTACGGGCGAGACGGATCCAAGCATCGTC  
TACGAAACCGATAACGCCAACACGTGGGTGGCTACGGTACCGCTGCATTCTTCATCATT  
GTGTTTCGGAACGGTTGTTGTCAGGCGCAATCAACATGATGAAGGGGCATCGCTGGGGACGC  
GGAGCTGTGTCATGCTGAATATTATTTGTTGCCGGCTGCGTATTACATGTTTATCGAA  
GGCCGATTCTCCTGGGCGATCGTCACAGGAATCTCAGCTCTCTTCGTTTTGGGCGCACTG  
TTTAATAAGCGCGCCGTCTTTTGGGCTAACAACGAGATC

>RXN02465-downstream  
TAGCCTAGAGCAACGATCTCAGA

>RXN02466-upstream  
CGAACCGCAAAGCGTTCCGCTGACGGAAGTCCCGCTGGCGGCAGCTACACCGAAACCGG  
TGCTGGCACTTTCCGCCAGGTGGGCGTGCTCTTCCTCGC

>RXN02466  
GTGGGCGAGGGCAGGAACAACTTTTACGTACGTCAATTGAGATTGAGGATGGCGTCAAC  
ACGGCCGCTTATGGTGGCGACGATGCG

RXN02505-upstream  
TCGGAAGCAATCCGGAACATTCAGGTTGTAGACAATGTCATCAGTTCAGTTGACCGTCC  
CATTAAGCGCACTGGTCGTTTGCCTATTCCGGGGTCTTT

>RXN02505  
GTGGCTGGCACTCATGCGTATGTCAATGAACTCTTTCGGAATGAGTTCAGCATGTGC  
CGAAAGAATGAACCTGGTTTGGTCATTGAGCTGGAGAACATCAGCATCGATCGCATTGTC  
ATTTCCACACCAGATGCCACCGCTATGCGGATGAGCTCATGGCGGCTGTT

>RXN02505-downstream  
TAGAACTCAGTTTCCGTCAATAA

RXN02510-upstream  
CCCGTCGATGAGGCAATCGCTGTGATTTCTTCTTGGATTGGTGACCGCATCAATGATCAG  
CCGAGCGAGGACTCCATTGCAGCTCGCAGGTAGCCCTGAG

>RXN02510  
ATGGACTCATCTGACAGCCACGTTGGTCAGGATGTATATGTTGATCAAGGTCTAGGGGAG  
CCCGACAGACTGGAACGTCTGTGGGCGCCCTACCGGATGAGCTACATCAAACTCGATCT  
GGCGGTAAGCAATCAACTACCGCCAAGCGGGACCCCTTCATTGAGGTTCCCAAATGAGT  
GATGAGGACGGCCTGATCGTTGCGCGGGGTGAGCTGGTGTATTGCGTACTCAACTTGTAT  
CCCTACAACGCTGGACACATGATGGTGATCCCATTCCGTAAGGAAAAGAATCTAGAGGAT  
TTGAGCTTGGCAGAACTGCGGAGTTGATGCTCTTTACCCAAACGGCCATCAAGGCGCTG  
AAGCAGGTGTCAAACCTTGATGCTGTCAATGTTGGTTTAAACCTTGGCAAAGCATCGGGT  
GGCTCAGTGGGAGATCACCTTCATGTCCATGTGGTGCCTAGGTGGTGGGTGATGCTAAT  
TTCATGACTGTGATTGACGGTGTCAAAGTGCTACCGCAGACCCCTGCGTCAAACAGGGCC  
ATGCTTGCGCAAGCATGGGGCACCATTGATGGGGCACCAGGCACTGTCGACCCAACGCTG

ACTTCAGCGATCCGTACCGCAGCACCGAAGGAGCAC

>RXN02510-downstream  
TGATGCTGGGACTTCATGGACGT

RXN02519-upstream  
AAACAGAAAATGGTTTCCTCGGGCACCTCGTCCCCCTACGCCAATTTCTCGACACTTTGCC  
GCGCATCGGCACCGCTGGTTCCAGATCAGCGACCCCTCCAC

>RXN02519  
GTGGAAGACGAGCAGAGCCCTTTAGGGGCAACGCTTTTCGACGTCGCGACCGGCGCGAGC  
TCCATCAACGACCGCGATACCGACGCCTCAGGGCTTGAGCCTGAAAAGATTGCGCGATTT  
GCATGGCTGCGCCTGATCGGCACCATGGGTGCGTTAATGATCGCGTTTGGTGCGCTGGGC  
GCGGGTGCACTTCCGGTGGTGAATAATCCGTATGTGGATTTCCTGGCGGAACTTCATG  
AGCCGAATGCTGCAGACCTCTTCCATGATCGTGCTCATCGGCGTGGGATTTTTGGTGCTG  
GCGTGGGTGTTAATGGCACCGCTGGTGGGTATTCTTTTAAACGCAGCGGAAACAGAACA  
GCCAGCGTGAGTTTGTCCATGCTGCGCCGCACATTTGGCGCCTGGGTAGCGCCCATCATG  
CTACCCGCCCACTGTTTACTCAAGACATTTATTCTTATCTGGCACAAGGCTCTGTGACC  
GCGCAGGGAATGGATGCCTACGCCGGTGGACCGCTTGAACATTGGGGCCCGATAATCAT  
CTGGCACGGTCCGTGCCCTTTATTTGGGGCCAGTCGCCCTACGCCCTGTTGGC  
CTGAGCATCGCGCGTCGATAAGCGTTATTACTAATGACAGCATCGTTGGAGGCGTGCTG  
GCGCACCGTATTGCGTCGCTGCTGGGCGTTGTGGCTGCAGGCTGGGCGATCACCATGCTG  
GCCAGGCGCTGTCGGGTATCTGAAGAAGCGTCCTTTTACCTGGGCGTACTTAATCCGCTG  
CTGATTCTGCACCTGATCGGCGGTATTCACAACGAATCCATCCTGCTGGGATTTTTACTT  
GTTGGCCTGGAACCTCGGACTGCGTGGCACCGACCGGATTCAAACAGGGCTGTGGGGGCT  
GCGTGGACATATATTGCACTGAGTGGCGTATTGATTTCTTGCGCAGGCTGGTCAAGGTG  
ACCGGCTTTATTGGGCTCGGTTTTGTGGGCATGGCCTTGGCCAGGGCGTTTCATGCACGT  
GGACATCGACACGTCGTTGCGATCGGCGTTGCAGGCTCGTTCAAGTAGCAGCCCTGGTG  
ATCACCGTGGTTGTTCTCAGTGTGATTACCGGAATCAGTTTGGGGTGGATCACAGGTCAA  
GGTGGCGCTGCGACGATCCGAAGCTGGATGTCTATGACCACCAACATTGGCGTTATTTCT  
GGATTCATCGGAATGAATTTGGGGCTAGGCGACCACACCGCAGCCATGCTCGTTGTGACC  
CGTGCAGCCGAATCGCGGTAGCTGCCGCCCTCATGGTTCTGATGTTGTTTGCCACATAT  
AGAGGTCACATTCACGCTGTGGGCGGACTGGGCGTGGCGACTTTCGTCCTCGTTATCCTC  
TTCCCCGTGGTGCATCCGTGGTACATGCTGTGGGCTATCGTGCCGCTAGCTTCCTGGGCA  
AATAGACTGTTCTTCCAGCTCGGAGTGATTGCCCTACTCCACTGCCTTCAGTTTCTTTGTG  
CTGCCCTCGCGGGCTTGCACTTCCAGTCGGAACGTCTTTTCCATCTACTTCGGCGCAGCG  
CTCGGATTACGATTCTCCTATTAGTTGGATGGTGGAGTTTGAGGCGGAATCCAACCTTT  
GGTTTACAC

>RXN02519-downstream  
TGATCAACTGTGACTACTGATTT

RXN02520-upstream  
TTTGCGCTGGTAGGGGGGAAGGGATTGGACACGGGAATGGAATTAGGGAACACTTGTGTT  
GTCTAAAGGTGAAAGCTAAATCAAGCAGGAGGTGACACCA

>RXN02520  
GTGGGAGATGTTGTAAAAGGCAACGACGCGCACACCGGAGACGGTGATACGCGCCGAAAA  
ATTCTTCTCATCCTGTTGGAACGTGCACCGGTGATCGCTTCAGATATTGCTGAACAGCTT  
CAGCTTTCAACTGTGGGAGTGCGCAGGCACCTAGACAACCTGGTTGAAGAAAACTGGCG  
GAGGCGGCAAATCCGCGCCAGAACCCATATGAGCCCAAAATGCGCGGTAGGCCAGCAAAA  
ACTTATCGGCTTACTGATAAAGGTCGCTCAATCTTCGGCCACGAATATGATTCCCTTGCT  
GCGGCAGCTCTAGCCACTCTTCGAGAGGTCGGCGGAGATGATGCAGTAAGGCAATTTGCT  
AGAAAGCGGATCGAAACAATTGTTGAGGGTATTACCCAGCAGATGTCACAGATCAATCA  
ATCGAAGATACAGCCAAATCTTTAGTTGAAGCTTTTAGTCGGCATGGTTATGCAGCAACT  
GTCGATGCCACTCGAAACGGGTTGCAACTCTGCCAGCATCACTGTCCAATATCTACAGTC  
GCCACGGAATTTCCGGAACGTGTGTGAGGCAGAGCATCAAGCAGTCTCAGAACTTTTGGGG  
CAGCACACGCAACCATTTGGCAACAATCGCGGACGGCCACGGCATCTGCACAACAAATATT  
GCATTGACACCCATCAAACACTCC

>RXN02520-downstream  
TGATGAAAGGAGCGGATCATGAC

RXN02534-upstream  
TTACCAGTAATCTATGCAGATTTACTGTCCGTTGGGGATCCGCGCCTATCGGAAGTTGCC  
TACATTATAAAAACTCAGATTCAGGAATACACAGACCATG

>RXN02534  
ATGAATTCACCGAACGCGGACATTATTTTAGTAGTTAACAAGCTGTCCAAGTTTATTGAT  
ATCGAAAATATTATGCTCGTTGGAGCACGATGTAGAGACATTCACCAGCAAAAATATCGC  
GATCAAACAGCGGGTAGAAGAACTAAGGATGTTGACTTCGCTTTAGCTTTAGAAAGCTGG  
GACGACTTCAATCTATTAAAGCAACAATTCTCACCAGCTGGTAACGCATGGCAAGGAATC  
ACCATTGGAAATATTCCAGTAGATCTCGTGCCATTTCGGAAATATTGAAAACCCACCCGGT  
GAAGTCTTGTCCAGAAAAGGTCATCTACTTAATGTCTGCTGGGTTCAAGGAAGTATTCGAG  
CAAGCTGAGCTATATCCCTAAATGATGCGATAGACATTAAGTTGTCTACAGTTCCCGGA  
CTTACTGCGCTAAAGCTACATGCATGGCTCGACCGTAAAGAAAATAACATCAAAGATGCA  
AGCGATCTAGCATTAATCTTGTCTGGTACGAAGAGGATGTAGAACTTTATGGAATCGC  
TATTTTGGCCTGGAAAATCAAGGATACATAGGTGAACCAGAGGCAATGGCAGCTGAATTA  
CTAGGACTTGACACTGGAAGAATACTCGGCCACAAGGAACTCAAGCCCTCCTTGATCGA  
TTTAATGAACAGTCTCCTCCTGAGCTAAACCAATTTGCTGAATCACTTGAAGCCCCCTCT  
GAACACAGTCACCCATTAGAACGGCGTCTGATCCAGGTTCGAGGCACTGTTAGGTGGACTT  
AGAGATTCCCTCGGTTACGATGAA

>RXN02534-downstream  
TAGCTTCCAATCCCGCATTTGTTT

RXN02537-upstream  
ACCTCCATCTCAACAATCATCTTTCCGATATGCGCACTGTCAGCGAGCAGATGCTCAACA  
TAGACGTCGATCTTGCCACACACTGAATAAGTTGCACTG

>RXN02537  
ATGCTCGCCCTCAAAAGTTTCAGAATTAGAAGGCATAGCCACATCACTCACCGCCGTGGCG  
GGTGCCTCCACGAATCAAACACTGACCGGTTGCAGTCTTGGCAGCAGCTCGAAACGATG  
ACCTCTGCCAGCTCCCTTATCCAGGGCTTTATCAAGCTGTCTGATTACAACCGACCCACA  
GTGAATATCGTGGAAACAAATGCACAAAACCGCATCCACGCTTTTCAACACCGCTGATTTT  
CTACGCACTTTGGAAGGCTATGTTGATGTACTGGAAAAACAAGCCGATAAATCTATAACG  
CTCACCGTCATGCTTCGATATATTGCCAGCTTGAGTAGCCTTTTAGACCTCATGTGTGCA  
CGCGAGATCAACGCGTTGTGCACAGCGATTACTCCAGAACCATTGAAGCATCTGGGCGAT  
TTTGGCACTCTACCGCCTCAGCAATCCACGAGTTTCATTTGG

>RXN02537-downstream  
TGAATGCCCCACCAGAAATCCGT

>RXN02538-upstream  
GCGAGATCAACGCGTTGTGCACAGCGATTACTCCAGAACCATTGAAGCATCTGGGCGATT  
TTGGCACTCTACCGCCTCAGCAATCCACGAGTTTCATTTG

>RXN02538  
GTGAATGCCCCACCAGAAATCCGTGCCTTAGCCGAAGCCCATCCCGATATGCAGATCCTA  
GAAGCCGGCGATGGTTCAATTGGTAGCATCGTTTGGGGATATTGATAGGGCTACGACCGTG  
ACCACCATCGTGGCAGGTGTGGGTTCCCTCCAACCCAGAAGGGTGAATACATATGTTGAC  
CGTGCCCGCACAGTATCTGCTTCCACCGGTTCCGCAACGCTGTTGTGGCTGGGATATCAA  
GCACCCGCTTCGATTCCCTGCTGCGGTATCCGGCGCGGCAGCGAATCGCGCTGCCGCGGAT  
CTCCAGAGGTTTCAAGCGGCACTACAGTCCCGCAATCCCCACCAAAGAAAAGTAGTGATG  
GGCTACAGCTACGGTTCCACAGTGGTGGGAAAAGCTGCGTCTTCCGGCGAGCTCAGTGCC  
GATGCGTTGGTATTGGTTGGCAGTCCCGCGCGGTGTCTCGCACTCTTCCCAGCTTGGC  
GCACCTGTGTATGCGGTAACAGGGTCTGCTGATCCCATCGGTTTGGCCGGCACCCAATAT

GACGGCATCCACGGCACTGATCCCACCGCTGCCCTATTCGGTGCAACAGTGTGGGATTCTG  
CCCTCAACGCATTCCGGTTATTGGAATGACCAGGAGTTCTTGGGCAATGTGGCGGAGGTG  
GTTTCGGGCAAA

>RXN02538-downstream  
TAGAAAAGCCGCCGCACACTGGA

RXN02555-upstream  
GTTTTATCGCTATTTAATACAGGCCTACCCCCACTACCCCCATTTCAGTTCAGGGAATCCC  
CGGATTTAAAACAATTAAAAACCCTCTAGAATGAGACATT

>RXN02555  
ATGGGCGAACAATTTCCAGGCGATAAAAACATCCGAGTCAGCGACACCGAAAGATCAGCA  
GCACTAGCAGCACTCGGCCAGTTCTACGCAGAAGGTCGCCTCTCCCTAGAAGAAACCGAC  
GACCGCTGCGAAGCCGTCGCCGACGCCAAAACCCGCGGCGACCTCAACGCCATCTTCTAC  
GATCTGCCCCAACCAACAAATCGCAGTCGTCGACCGCTCCGAACAAACCTACACAGCCACC  
GAAGTTGCCGAACCTCACCGCAAAGGCGCACGCCCACGCGCCGGAATCCTCGGACTCACC  
ACAGTTTTAGCCATCACCGGTACCGCTGCTTTTCGCCAGCACCACAGCTTTTGCAACAGTA  
CTTTTAGCCCTGATTCCGATCGTGTTCATCATGCTGTACGTGATGAAAAATTGGTCTGAA  
TCCTGGCAGCACCACCAACACCTCGCCAACTTCAGCGAAAGCGCATGATCGAACTGCGTGAA  
AAGGAAAACTCCGCGACATGGAGCTCAAAGCCCAGCGCAAGGAACGCACCCACGCATTA  
ACCAACCGCGCGTTGGATGCTGCTGAAACTGCTTTCAACACCAAGCCCTGGAAGAAGAAC  
AAA

>RXN02555-downstream  
TAGGGCTTTTGAAGTGTGTCGCG

>RXN02564-upstream  
ACACCACAGTGAAGCGGTGACGTGAATCACCCAAGCACTTAGGCATCAAACATTCAAGAG  
CTTGTTGTCCAAAAGTCCGACCGAGAGGGATTCCCCCAA

>RXN02564  
ATGGCCGAAGTAGGAGCAGAACCCGCGAGGGTCTGCACAATCCAAAACATAACAATTTGTT  
GTAGGTACCGCAGCGGTGGTCACTGCAATCGCTGCGTTTTTCTCCATCCAGTCTGCA  
TCCGGTGGCGAGGATATTCTGTTCCAACATGACCGTGATTGCTCCTGCAGCTGCAGGTGGA  
GGTTGGGATACTTTCCAACGTGAGCAGCAGAGTCTATGCGCGTGAATAAGATCGTGAAC  
AATATTAGGTGGTCAACATCCCTGGAGCTGGTGGAACCATTCGACTTGGCAAACGTCT  
ACCATGACTGCACCGAACACCTTGATGGTGGGTGGAACGGGGCATATCGCAGCACAAATT  
CAATTCGATACCCCTGCGAAAATCCAGGATGTCACCCCAATTGCTCGTGTGGTGGAAGAG  
TTGCACATCATCACCGTGCCAGCGGATTCTCCATACAACACCCCTTGAAGAGCTCATTGAA  
GGTTGGAAGGCAGATCCAGCAGGAGTGTCTCGGACCGGTGGTGGTTTCTTTGACCAGCTT  
GTTATGACAGAAATTGCACTGTCTGCAGGTATAGATCCTAAGCAAACACCTTTATTCCT  
TCTGATGGTGGTGGCGAAGCGATTTCAGGCGCTACTGAACGGAACCGCAAAGGCATCAACT  
GGTGGTTTTGCTGATATGTATCCGCGAGGTAGAAGCCGGTCGATTGAAGGTTTTGGGAATT  
GCTGCAGAAGAAGCCCTTCCAGGTTCTGACATTTCAACGCTAGTGGAACAAGGCTATGAC  
GTGACCTTGACCAACTGGCGTGCCATGTTTCGCTCCTCCTGGTTTGAGCGATGATCAAATT  
GCGGAACCTTCGAGCAATCGTTGCGGAGTCTGTGGAGACTGCTGAATGGCAGTCCGCGGTG  
GAACGAAACTACTGGATGAACGCCTCACTTGAAGGCGAAGAACTCGACCAGTTTGTGAA  
GATGAAATTGACCGAATTGATCAGCTATTCAAGGAGATGGGC

>RXN02564-downstream  
TAGTGAACGTCACTGAACAATCC

RXN02568-upstream  
CCAGCTACGATATGGAATTTACCAAATGCGAACTACCCTAAATACCAAAGACAGACAGT  
GACAGCCCCCTTCGAGAATGCAGCAAGAGACGACACCTCCT

>RXN02568  
ATGGACGGCACCTCGCCACAGAACAAAATTTCCACCACTCCCCAGCGCCAGGAAATGCT



ATTCTGCACCTGGAGGCGCCATTCTACACCAGCGAAAACCTGAGCAGGACGCAGTACCT  
 CCAACTGTGGCGGCGAAACTACCCGTACCTGGAAGTTCTATTCCAGCACCCGGTAGAGCA  
 TTGCCAACTCCAGTGGCTCCGGGAGGTTCCGTCCCAGCTCCGAGAGCGTCCGCACCTGCG  
 GTTCCTAACGTTCTTGCAGCTCCCGGCGCTGCTGTTCCAGCTCCGGGAATCTCGATCCCG  
 GCAGACCTAGTGCCCCAGGCAGTGCAATTCCAACACCAGGCACAGCAATCCCTGTGCCT  
 GGAAGTGCAACTCCTGTCCAGCACCTGGGGTTAGTGCACCTGGCGCAAGCGTTCCAAGC  
 ATTCAGATGCCAGGATCTGTCAACCCACCTGCACCAGGAATTTCCGCACCTGGCGGTGCA  
 CTTCCGACTCCTGGCAGTGCGCCCCAACACCTGGCGGTGCCCTTCCGACTCCAGGTGAG  
 GCACTTCCCGTTCCCGGAGCACCTGGTGCACCCGAGCATCCGGAATCCCAAGTCTTGGC  
 CTTCCAACCCCAAGGTGTCCCAACTCCCGGAGCTTCTTACCAGTCCAGGAGCACCAGAC  
 GCACCTGGAACCCCAAGCATTTCCCGCAGCTCCCGGCATTCAAGCACCAGGAATTCAGCA  
 GCACCAGGAGCCCCCTGCCCAAGCTGCTGCTCACGCAAAGCCAGTATTCGAAGATGCAGAG  
 AAACGACCTCGCACAGATGAAGCTGGAAATGCGAAGAAGGAACCTGCCGCTGAGAGTTCGG  
 TTGGCGCAGCCAATTACACGTAAGCAGTGGGCAATGACTCTTGGTGTCTTGGTTCTCGGA  
 GCAATTGTGCTGGCTGCAATCGCGGTGGTCTTGCCAAATGGGCGTTTACCACGGAGTGG  
 TTGCAGGACTTCGTGAGAGTATCCGGGTAAATATGACAACCCCGAAGGTGCGCCAGTA  
 GGAATTCCAACGTGGCTGAGTTGGCAGCACTTCTTCAACATGTTCTTCATGGTGTGATT  
 ATCAAGACGGGCATTGAGATCAATAGAACCCGAGGCCAAAGGGTTATTGGACGCCGAAA  
 AAGGGTGGCAAGAAGATCTCCTTGACGTTGTGGATCCACCTGGTTTTGGATTGTGTGG  
 ATCATCAACGGTGCGGTGTTTCATCATTTTTGTTGTTTCGCGACGGGTCAGTGGATGCGCATT  
 GTTCCAACCAAGTTGGGATGTGTTCCCGAACGCGCTGAGTGCTGGTTTGCAGTATGTGTGCG  
 TTGGATTGGCCGACTGAGAATGGTTGGGCGAATTACAACAGTTTTGCAGGAGCTGACGTAC  
 TTCTTCACTGTCTTTATTGCGGCACCGTTGTGCGATTGTGTCTGGTTTCCGGATGTGAGT  
 TACTGGCCTAAGAACAATGCGACGATGAATAAGTTGATCCCCATCGGGTTTGCTCGTGCG  
 CTGACATGCCAGTGATGGTGTATTACATCGTGTTCAATTGTATCCACGTGTTCTTGGTG  
 TTGGCGACCGGCGCGTTGCGCAATTTCAACCATATGTATGCAGGTCAAGACGTTGTGAAC  
 TGGGTTGGTTTTGGTTGGTTTCGTGGCGTCGTTG

## RXN02593-upstream

GCGTTCACTTCCGCCACCTTGAGGATGAGTGGTATCACGCCAGCACACAACAAAGGATCTT  
 CATAGGGTTATTACGTCTAGCTGCTTTTAAACAAGCCATA

## &gt;RXN02593

ATGGAAGCCATGGCCACAACGATCACCGTTTTCTCTCCACCCACTCCCCCGCACAAATC  
 CGCGAAACCATCCTCAGCGCCGCGAAAGAAGACGACGTGGACTTCTCGGAGTCCCCTTT  
 ACCCACCCAGAAACGTCACCATCGAAGTCGACGACGAACGATCAACGACTGCTTAGGC  
 TGGCTCGACGACGTGGCACTCGCCTCCGGCCTGGGCATCCAATACAACGACGAAGTGCTC  
 CGCTACGGCGACGAAGACATTTCTTTTACCGTCCAAACCAAAAATGACGATGACGCCCCG  
 ATCGGCGCCTCCCGCCTTGGACTCGAGCACCAGTTGAACGTCATTGCCGGGGGCTCTGGA  
 GATTCGGGGGATTCCGGGGATTATTTGAAGATTGCACACTTCGACCTAGACAACCCCGCC  
 GACGAGTCTCTTACATCTTCGCGCGCAGCCTCGCAGAAGTAGACGGCTGGACCCTAGAA  
 TTCCGGCGTCGACGAGTAAAAAACACCACCATTTGTTTCTTCCATCGACGATGCCATCACC  
 ACCATTTTGCATGGATGAACGGCGAAGACATCCGCGACCTCAACTGGACCCGCGCA

## &gt;RXN02593-downstream

TAAATGGCCTCATTTCCGGAGCT

## RXN02606-upstream

AGGGCGCGGATCACTTCGGATCTGTGGATAACTTTTAAGGCCCTTGTTTTCCCCTTGAAG  
 CTTCCGGTTGTGTGGAAAACAGAAAAGGAGGGGAAAAACAAA

## &gt;RXN02606

ATGCAAGAAATCCACACCATCATGAAACACATGGACGCGTCATCGCCGACCCGTCCGCC  
 GCCGCATTCAAAGCAACACTCCCCTTCGCCGAACCTCTCGAAAAGCTCCACAACAAAAA  
 GCGCTTTTTCGACGCCGCCCTCGCCAAATCCGCCGAGCGCGCCGATGCCGGACGCATCATC  
 GGAAAAACCTCCCACATCGATGCCCTCGCGTACCTTCTCGACATCTCCAAATCCGAAGCA  
 TTCCGACGCACAAAACGCGCCGAAGAACACTACGGCAACCCAAGCCCGGAACCCAGTTCA  
 GAAGAACTCGCGAAGAAAACCCCGAAGAGAAGCTAGCCAGAGAAGAAAAGAGAAACAA  
 GACCTAGCCGAACAAGCAGAAGCCAACCGCATCGCCCGCAACACGGCATCTCCGCCGAA

AAACAAGACACCATCCGCTACGAACTAGAAAACTCAACGACAACACATCCCTATCCCGA  
GCCTCACTCCGCAAACCTAGCAATGCAGGAAGCCACCAGCCGAACCCCGAAGACCTACGC  
AACTGGACCCGCAACAAAGTTATCCGCATAAACCCCAACCGCCAAAGACCCACTCGCCGCA  
GTAAAGAAACGCTCCTTAAGCATCGGACGCCAAGACCACGACGGCGGAGCCAAAGCATCC  
CTCTATTTAGATGCCAAAGGTCTAGCCCTGCTCAAATCACTGATGTCTAAAGCCAAGCCG  
GGGCATTTGCTTGAAGACTCTTTGGCGGAGGATAAACGTACGAAACCGCAACGCCAATAC  
GATGCCTTCGCCGACATCCTCCACCGCGCACACAGCGATCTCCTCCCCGCACGATCCGGA  
GTGGGCACCATCCTCGTCTCCCTCTCCGCCAAAGACGTAACAAACCTCAAAGCATCGGGC  
CCCCACCACCGCTACCCCAACAGCACCAGGCATAAACTCACACCGCTTGAGATCCTGCGA  
CTCGGTGCAGCCAAATATGACTTCGTGACCGTCTCTGACTCCGAATCCGGCCGTCCGCTG  
CACCTGGCAGCAGCTCAACGCACCGCCAGCCTGTATCAACGCCTAGCCCTCTTCGCCTCC  
GAACTCGTCTGCACCCGCGAAGGCTGCGACTCCCCCTTCGAAGACAACGAAATACACCAC  
ATCAGATCCTGGCTAGACGGCGGCCCCACAGACATAGAAAACATCACCAACATCTGCCCC  
CACGACCACGGAAACAACAACGACCAACGCGACGGCAAAGACAACATGGGGCACATGAAC  
ATAGATCCCAACACCGGGCGGTCGGATATCAACCCGCCGACCGCCGAAAACCCATGCGG  
TTTAAACAACACCGCAGCCGACGAGAATCAGGAGGAGCACAGGCCAGGACC

>RXN02606-downstream  
TAAGTTTTTAGCGCGCCAAAAAG

RXN02610-upstream  
CCAGCTCATCGTGACGGACGCACCAGCGTGAAGGAAGATCAAGCAGCGGAAATTTCTAC  
GCTGCTGAAGGAATCTGCGGATCGGACGTATTGTTAACCG

>RXN02610  
ATGAGGAAAACCATCACCGTTATTGCTGTATTGATCGTCTCGCCTTAATCGGCGTGCGG  
ATCGTGACAGTATGTGAACACATCCGATGACTCAGATTTTCATTGGCCAGCCTGGCGAGCCA  
ACCGGTACCGAAACCACGGAACCACCGGTTCAACCTGATTTGGTGCCCTGCGGTAGAAGTC  
ATTGCCGCGCCGGGTACGTGGGAGTCGGCTGCTAATGATGATCCGATCAACCCGACCGCT  
AATCCGCTGTCAATTCATGTTGAGCATCACTCAGCCACTGCAGGAGCGTTATTCTGCGGAT  
GACGTCAAGGTGTGGACGCTGCCGTACACTGCGCAGTTCGCGAACATCAACTCGCAAAAT  
GAGATGTCTATGATGATTGCGCAATGAAGGCACCGCGAAGATGAATGAGGAACTGATC  
AACACTCACAAATGAGTGCCCTGCCACGGAGTTTCATCATCGTTGGTTTCTCCCAGGGTGCG  
GTCATTGCGGGCGATGTGGCTGCTCAGATCGGTTTCAGAGCAAGGTGTTATTCCAGCTGAC  
AGCGTCAGGGGTGTGCGCCCTGATCGCTGACGGTCCGCGGGAGCCTGGTGTGGGCCAGTTC  
CCAGGCACGTTTGTGGATGGCATCGGCGCGGAGGTTACTCTGCAGCCTTTGAACTTGCTG  
GTGCAGCCGATTTGTTCCGGGCGCAACCATGCGTGCGGGCGCGCGGGCGGTTTCGGTGTG  
CTCAACGACCGGGTGACAGGATATTTGTGCTCCAAATGATGCGATCTGTGATGCTCCGGTG  
AATGTGCGCAACGCCCTTGATCGTGCGTTGGCCATGGTCTCCGCCAACGGTGTGCACGCG  
CTCTACGCCACCAATCCGGATGTTTTCCAGGCACAACCACCAATGCGTGGGTTGTGGAT  
TGGGCGACCAACCTCATCGACAACGGA

>RXN02610-downstream  
TAAAGCTTTTTTCGCTTTTCGACG

RXN02624-upstream  
ACCCGGTCAGATCCGACGTGCGCGGCCAAAACCGCAAGCACCTGCGCAAACGCCACAGAA  
GGCAGCTCAGCAATCAAAGTTGCTGCGTTTCCTTCCAACC

>RXN02624  
GTGCTGATTCCGCATGGCGTGCGGTGCTTTTGGTTATTATTCTCGCCGTAGCCTCCCTA  
ATGTTACCAATTCTTCAATGGTGAATCTTTCGGCAACGATTGCACAGCTGTGGCTTTCC  
CTAAATCTCGGTGCGGTGGACGGCAGTGGGGAAGTGATCTCAGTACTGCCCACGCTTCCC  
GGCTTTATATTCTCTGGGCCATCGCCGCGCGCATCCACCGCGCAGTCAAAGATCGTGTC  
AGCATCGCCGACTTAGGCGTCTCTGCGAGCACTCGTCTCGGCATCCCGCTTGCGCTCACC  
GCCATCGCAGCGTTACATGCTTTTCGACGCTCCAGCGTCTCAACGTGAGGTCGCCCA  
ATCACGCGCTCTCTACGCGTGATGTTGTTCCACCTCAGCGCCCTCTTCTCGGCATGGGG  
CCACGCTGTGGCAGGCGTTGGCGCGCCGCTACGGTGCTCCAGAATGGCTTATCGACGCC  
ATCACCCAAGCTTTCCGCTTCTCATCGCATTTGGAACAGTCTCTTGGTTTCCGTGCTC

GTGATGACCGCGATCAACCACAGTGCATTACCGCGACCATGCAGGGTTACGACGACTCC  
GCCTCTGTTGTGGCCTTGATCGTCTGAGCATTCTGTATCTGCCAACATGATGATCTTT  
GCGATGGGCAATCTGATCGGCTCACCCCTTTACTTCGGTGACGCTCCATCAGCGTCTTC  
AGCGTGCATTCCGTTCCATTGCCACCGCTTCCCATCCTCGCAGCTCTCCCCAGCGAAGCC  
CTCTCATGGGCAGTGGCCTTACTGGTCATCCCTGCAATTATTGCCACCTGGGTCTGCGTG  
AGAAACCCCATGCGCCTTGCCGTGAACACAACAGCAGCAGTCATTTCAGCACTGTGTTTC  
CTCGTCTGGCAGTTTTCGCCGGCGGAACCTTGGGCGTATACAACACGTCGGACTCAAC  
CTCCTGGCGTCAGTTGGCCTAGTTTTCGTCTATTTTCGCCCTCGTTGGACTCCTCATCGCC  
GGAATCGACAAGCTGCGCAACCCCTGTAGAAGTTAAGTCTGTTAAGGCTGTGGCTGTTGTG  
GAGCCCGAGCCTGAAGAAGTTGAAGAGGACGAAGAGGAGCATGTTGAAGAAGAAGTAGAT  
GAGGAGGAAGAGGAAGTTGAGGAAGGGGTAGAAGAGGTGGAAGAAGACGACGCAGAGGAT  
CCTGAAGAGAATCCTGAAGAGGAAGAATCCGACGAAGAAATTGAGACAGAACTGAGGCT  
GAAGAAACCAATGATGGTTCCGAGGCCGAAGACCGT

>RXN02624-downstream  
TAACATATCTGTTGTGAATTCTG

RXN02626-upstream  
GTAGCGGTGCAATTATTTGCCTGTGGGCATAATTTTGAGACAAAATAATAGAAACGTCTC  
AGATGTTGGGAAGTTCTTCACGCTATCAGTTAGGGAGCAC

>RXN02626  
ATGAGTACTCAAGTTGAACTCAAAACACCGAAATCGGAAGACCGGGCAGCATATATCGCT  
GCATTGGGATTCCTGGTCTTGGTCATCATTGGCGGCATCATCGGATTCACAGCCTCGGAT  
GTTGTGCTCAATATTTCTTCGTGGGTCAATCCTTTGCTGGGCATCATCATGTTCTCCATG  
GGCCTGACCTTGAAGCCAGTTGACTTCGCCCTTGTGCTAAACGCCCACTCCCAGTTCTT  
ATCGGCGTGATCGCCAGTTTGTTCATCATGCCCCGTGATCGCATTTGCTGGTGGTCTGGGTT  
TTGCGAGCTGCCTGCGGAAATTGCGGCCGGTGTTCATCTTGGTTGGTTGTGCACCTGGCGGA  
ACTTCCTCCAACGTGGTGTCTTACCTGTCCCGTGGTGATGTTGCGCTGTCTGTCAACATG  
ACTTCCATCTCCACGCTGCTTGTCTCAATTTTCACTCCACTGCTTACCCTGTGGCTGGCG  
GGGCAATACATGCCACTTAATGCCGCTGATATGGCTGTATCCATCGTCCAAGTTGTGCTG  
ATCCAGTCGTGGGCGGACTTGTGTGCGGTTGATCTTCCGACACTCATTGGCAAGGTT  
TTGCCCTCTTTTGCCATGGATTTTCAGTCATTGCGATTTTCATTGATCGTTGCCATCGTGGTC  
GCTGGTTCAAGGGATAAAATCCTCGAAGCAGGACTGCTCGTGCTGGCTGCCGTGATTATT  
CACAACACCCCTCGGCTACTCCCTGGGATACCTCGCTGCGAAATTCCTGCGCAGCCTGCT  
GCAGCTCGACGCACTACCGCGATTGAGGTGCGTATGCAAACTCCGGCCTCGCAGATGGA  
CTCGCATCCCAGTACATGTACCAATGTCTGCTCTGCCAGGCGCTATCTTCTCTGTCTGG  
CACAACCTTTCCGGAGCACTTCTTGTCTGCATTGTGCAGGGCGTCCGATAAGAGGGCTGCG  
GAGAAGGTGGCTTCAGAAAAGGCTGCCTCGGAGAAGGCCGCTTCC

>RXN02626-downstream  
TAAAAGGCTTCGCTCCTAAACT

RXN02656-upstream  
GCCATGTGGGACAGTCTAGCCATCTCCTTACACCCGTGAAACTCCTATTTTCATTAACGCA  
TTGATCTCGGCTTTTCTAACCTAGGTATAAGGTAACAGCT

>RXN02656  
ATGATTTTCGGCGTACTCGCATACTTGGGATGGGGCATGTTCCCGGCCTTTTCCCCTA  
CTTCTTCCGGCAGGACCGTTGAAATTTTAGCGCATCGGATCCTATGGACTGCTGTATTA  
ATGATGATTATCATTAGTTTCACGTCGGGATGGAAAGAGCTTAAGTCCGCTGATCGCGGT  
ACATGGTTACGCATTATATTGTTCATCGTTGTTTATTGCCGGGAACCTGGCTGATCTATGTC  
ATCGCTGTCAATTCTGGGCAAGTTACTGAAGCCGCTCTCGGATACTTTATTAACCCCTG  
TTAAGTGTCTGCTTGGCATTGTGTTCTTCAAAGAACAGTTACGAAAACCTGCAAAATTAGT  
GCGGTGGTTATTGCTGCTGCGGGGGTTTGGTACTAACATTTCTAGGTGATAAGCCACCG  
TATTTAGCGATAACACTAGCATTACATTCCGGCATCTATGGAGCGTTGAAAAACAAGTC  
AAGATGCTGCTGCTAGTTCTTGTGCGCTGAACTTTAGTACTGCTGCCATCGCAGTC  
ATATACCTGATTGGGCTCGAAGCTTCCGGTCACAGTACCTTTTCAACAATGGCAGTGGG  
CACATGGCGTTATTAATCTGCTCGGGTTTGGTACAGCCGTCCTCGCTGTTGATGTTTGCA  
TTGGCCGCCAAGGCAATACCTCTTCCACTGTCCGCATGCTGCAATATCTGACCCCAACG

ATGCAGATGCTGTGGGCATTGTTTGTGGTCAACGAATCAGTAGAACCAATGCGTTGGTTC  
GGATTCGTTTTTCATTTGGATCGCAGTTACTATTTACATCACAGATAGCCTACTTAAGAAG

>RXN02656-downstream  
TAGGTAATAGCAGTATTGATATG

RXN02673-upstream  
ACGCCCCAAAACGCTAATCCGCTGAACAGGCCGATGAAAGTAATAGAGTGTTCGTGTGGG  
AACGCCGAGACATAATGAAGTCATTTACAAGCGCCGCCGC

>RXN02673  
ATGGCAGCGCTCCTAGTTCTGCTCGTCGTGATTGCCTTGATTATCTGGGCAGTCGTCGCG  
CTTCGAGGTGGATCATCGGAGCCTGAGGAAGAGCAGCCAAATAATGCTGTAGTGACCTCC  
TCAATGGAATCTTCCGCGACGCTAGTTCTTCTTCTAAAGAATCCACGACTGAAGCCACC  
ACAGAAGAAGAGACTTCCAGTGTGAACCAACCGCAACATCCTCCGTTGCAGCAGATGCA  
AAAAAGACCTGTGAGCTTAGTGACTTGGTGATTTCCGCAAGCACTAATCAGCCGACTTTC  
TCAGGTTCTGCGCAGCCAGAATTATTTATGGCTGTGCATAATCCGACTGCTGTTGATTGC  
GAAATTGACCTCGAGGAGAACAACCTCCGTTTCGAGGTATACAATCTCGCGACCAACGCA  
CGAATCTGGTCTGATGTGCTGACTGCAACCCTGCAGTTGAAGACGGCACGAGCGTGTTCCT  
GCCGGCGAGGATCGCTACTTCCAGGCAACATGGTCTCGTACCACTTCAGCGCCAAACCAG  
TGCAACAACCGCACTGATGTCCCGCCGGTGGCTACTACTTGCACACTGTGGTTCGGTAAT  
AACCCTTCACCAGCGGTGACCTTTAACCTAACT

>RXN02673-downstream  
TAAACGGCCAAGTCCGTCGGTGA

RXN02680-upstream  
AATACCAGGTCAACACACACAGGAACCGTTCAGAAACCTTCCAGATTGCTCACTTTTTTAA  
TTTCACTTTTTTGAGAAAGTTTACTTTTATATTAGTTCTC

>RXN02680  
ATGCGCCTCAACAAACGACTCCCAGCGGCACTCTCCGGACTGCTGCTCTCTGCTGCCCTT  
CTTGCCGGATGCTCCACTTCTGGAACCGCCGAGACCACGACAACAACCGTTTCATCTGCT  
GCGGCATCAACAACCCTTCCACCTCCTCTGCTTCGCTTCTCTCTCTCTCTCTCTCTCT  
TCCTCTTCTCTCCGACTCAAGCACCACCGCCGAAACCATCTCCAACACCGCGGAAGCTGCC  
CAAGCTTTCTTGTCACCCCTGTCCACCGAAGAACAAGACGCCGTACTCTACGACTACGAC  
GCCGAAGAAAAGTCCACCGGCTGGTCTAACTTCCAGTCACCTTCGTGCAGCGTTCCGGC  
GTGAACCTCACCGACCTCACTGAGGAACAGCAAGCAGCTGCCCTCAACGTGCTGAAGAAC  
CTGCTCAACGACGACGCCCTACCAAATGATCGAAGACATCATGGCTAGCGATCAGTACCTC  
AACGACGAAAGCAACACCACCGAGGATTCCCTCGGCCAGTACTACATCGCATTCTTCGGC  
GATCCAAGCAGCGACTCCGACTGGTCCATCCAATTCGGCGGACACCACATCGGCATCAAC  
ACCACCTTCTCCGACGGTGCCATCACCTTCGCCCCAACCCACCTTGGCACCCAGCCTTCC  
GAGTGGACCAACGAGGACGGCGAAACCGTTGCAGCACTAAGCAACATGTACGAAACCGCC  
TTTCGCCTTCTACGACAGCCTCGCCGAAGAGCAGCAAGCACAGCTCTACCAGGGTGAAGAG  
TTGGATTCCATGGTGTGCGCACCGGGCAGCACGTGCGACTACCCAACCGGCACCGGCTTG  
AAAGGCTCTGACCTCACCGATGAGCAAAAAGAATTGCTCATCGATGTATCGCAAACTGG  
GTTGGCCTCGCCGATGAGGAAACCCGAAACTGAACTCGATGCCATCCGCGAAACCTTG  
GATGACACCTACATCAACTGGTCCGGCGCCACCGAGTACGACACCTCCACCGGCGACGGC  
ATCTACTTCCAGATCAGTGGCCCAAAGGTCTACATTGAGTTCGCTAACCAGCAAGGTTCT  
GCAGGTGCCGACATCGACGGTGTATCACCGCTGGATGGGGCCACATTCACACCATCTAC  
CGCGACCAACCAATGACTACGCTAACTCCGTAACTCAGGAAGCAGCCAGCGGAATGATG  
GGCGGCGGCCCTGGTGGTAATGGTGGCGAGATGCCTAGCGGTGACATGCCTACTGGTGAG  
ATGCCTTCTGGCGCTCCATCAAAC

>RXN02680-downstream  
TAACGCCATTTAAGAGGCCGAAC

RXN02693-upstream

CAGACCAAGTGTTATTTTTGTTGAAAAAATCACATTGTAAATCGAGCAAAACCAACCTAT  
GCCCTGCAGAATTGTGCATGCTCTGCCAAGATGACTCAAT

>RXN02693

ATGGTTTCGCTCCCCAGACTAGCGTCTCTGCTCACCCTCGCCTGGCAACGCTTAAACCC  
GCACTAAAACCTGCCACCCACCTCGCCTCCCTCGGCGCGCAGGTCATTGCAGAGCTAGTT  
CCGGGGATCCGAATGTCGCCAAACCGCAGGCGAATCCTCCCTGCAAATATGGGCGCTGGC  
TTTATCGGAGCGGAAATCGCAATGTGGTGGGCTCTCTCGCCGTCATTGTTGCCGAAACCG  
TGGTGGGTACGGCTGCTAACCTGGCTGTTTACAAGCGGTGGGGCATGCGGCAGCGACG  
GGAATCCACTCGATCCTCCCCAGAACCAACCGGCGGGTATCCAGGAAAAATTTACAACGCC  
ACCCACATCGCAACTGGTGCCATCACGTTGACCACCACGGTTGTGGGATTGATCAGGCAT  
CGCACCCAAATCCGGCTGATTGGGCAGAAGAATTTTGGACCGAAGGAGACGATCGCGGGC  
ATTAGTGTGGGCACCTTGGGGTACGGCGCGCTGCTGATCACCGGCGAATTAACCCAGCAC  
AGTATTAATGAGGTCAAGCTCCTAATTGAGAGGTTTTTACCGCCGTGGATAAGTTTCATC  
GCAGCGGTTTTCGGTCAATTACATTGACCACCTTGACCTTGGCCGATCGCGTTTTGTTGCGG  
CGCATCTTGCATAATTCTGCAATTCAAGCAGCGCACCTTAATCGCATGGTGTTCACAGGA  
ACTGAGCAGCCGTGGGAGCCGGAGCGTTCGGGTAGCCCGTGGTTCGTATGAAAAATGGGGT  
GCGGTGGGTTCGAGGGCCGTGCAGTGTGTCGGGAGGCCACGCAAAGATGACATCATC  
ACGGTAACCAAGGCTTTCTGACACGGAAACACATGAACCGATTCTGATTTTTATCGGTATG  
GTTCCGGGACGATCCTTAAGCGATCAGGTGGATCTTGTCATTTCATGAAATGCGCCGCACG  
GGAGCCCTGCGCCGCGACCATCGTGATCAACAATTCCACGGGCACCGGCTGGATCACC  
GATTGGTCCGCCCACACCTTTGAGTTCCTCACCGGCGGAACTGCGTGACAATTTCCATG  
CAATATTCTTATCTTCCAGTGCATGAGCTGGTACAAGGACAACGACGGCCCCATTAAT  
GCGGCGAGAATGCTTATCGACGCCGTCTTCCACGAGCTAGACCAGCTTCCACCGGGAGT  
CGCCCAAAGCTGTTCTCGCGGGAGAGTCACTGGGGGCGTATGGGTGGCTGAGGTGTGG  
GGAGACGTCGAAAAGCTTCTTGGAAACCGTGCACGGCGTGCTGCTCAGTGGGGCGCCGCGT  
TTTTTCGACGCCATGAATGCGTTGCGCACCCGGCGCGATGCGAGCAGCTCCGAGCGGCTG  
CCCGTGATTGATAGCGGGCGGCACATCCGTTTTGCGGGCGAGCTGAGCACCTTGATATG  
CCGGCTACCTGGCAGTTTCCGCGCATGATCGTGGCGCAGCACGCTCTGATCCAATTGTG  
TGGTGGAAACGCGGAGCTGTTTATTCGGCGGCGGGAATGGTTGAAAACCTCCAAGCAAGAC  
CACCAAGATGTCTTTCCCCGCTTGCATGGATGCCGTTTGTAAACCGCTGGCAGGTGGCT  
TTGGATTTGTTCACTTCAACCTCCGTTCCCGGCGGGCACGGGCACAATTATCACGAGGAG  
TTTATTGATTATTGGGCAGCTCTTTTGGAGCCGCAAGTCACCCCCGAGCTGCGCCACAGC  
ATTGCTTATTGGATCCGCGCGAACCACATCAAACGC

>RXN02693-downstream

TAGAGTGATTCCATGACGCATGC

RXN02696-upstream

CTTGGGAACCGACCGTAGCGTAGAAAATCAAGTTAAGGGTGTGACGAGCACCCCAGCTG  
CACATGAAATTTAAGACATTCCAGGTGAAGGGAAACTGCC

>RXN02696

ATGTCCATGCTCAAGAAGACTAAAGAATTCTTCGGACTCGCTCCATACGAAGCGGAGCAC  
GAGGATGCTTACTATGCAGATGAACCACGTTACGAGGGCACCGCTGCGTACGCACCTGAA  
TACCGTGAGCGTGACTACGGCTATGCACCAGAGGCACCAGCCCCGTGTTGCTCCATCGCCA  
GCACCTCGCTCTTACCAGTCCACCATCGTTCCAGTAGAGCTTCATTCTTTGAAGACGCT  
CAGGTATTGGTGGAGCATTTCCGACGGCGACGCGAGTTGTTTTCGACATGAGCTTGCTT  
TCCCGTGAGGAAGCACGCGCATTTGTGACATTTCGCTGCAGGCCTGTGCTTCGCATTGCGT  
GGCAAGATGCAAGATTGACAGCGTCACTTCGCTGTCGTTCCAGAGCTGTCCAACATC  
AGCACTTCCGAGCTCGAGCGCGCCGCACGCATCCGC

>RXN02696-downstream

TAAACACACCCCTCGTGGTGTGGA

RXN02697-upstream

TTTGGCTCACCTCGATGATGAGACATCCCCGATGAGGTGCGCGCACAGTTGCGGGCACT  
GGCTATCCGCTCAACCGAACGTCGGATGTAGTAGACGCGT

>RXN02697

ATGACACTTTTTCAACGTTTAACCAACCCTGTAGTGCTCGGCGGCCCTAGCAGGTGTTTTG  
CTTCTGCTCGGCTCTTTTCGGTGGCGGTGCCATTTCGGTACCGTGGCGGAGTGCTCGATGCG  
TTGGGGCTTAACCTTCCTTGCTTTTGGCCACGCGCAGGGTATTTCCAATACCGTGTTGTGG  
GTTGGGCAGCTGCTGCTGATTGGCGCGTGGGTTACCTTGGACGTCGGTTGTTCAAGAAA  
AAAGTCGCTGATGACACCGCAGACGCTGCTGACTTAGGTCTTGTAAGCGCACGTTGTAT  
GCCATGGTGGTGGCCCTCATTTTTGCGGCACCAATGATGTCGCGTGATGTTTATTCCTAT  
CTCATGCAGGGCGCGATGCTGCGTGATGGCTTCGATCCCTACACTGAGGGCGCTGCGGTA  
AACCCTGGCCCCATGTTGCTTGAGGTCTCTCATGATTGGCGCAACACCACGACGCCGTAT  
GGTCCACTACACCTGTGGATTGGAGACATGATCACCACGGTTGTGGGCGATAATGTCACC  
TTGGGCGTTCGCTTACAAGATCTTGTCGATCATTGGCCTTGCTGTGACAGGCTGGAGC  
ATTGTCCGCAATGACACAACATTTTGGAGCCAACCCAGCAATTGCATTGTGGATTGGTGTG  
GCCAATCCTGTGATGATCATCCACATGATCGGCGGCATGCACAATGAATCCCTCATGGTG  
GGATTGGTCAGCGTCGGCTTGTTGCTAGCACTGAAGAAGCGTTTCGTGGCAGGTGTGGCA  
CTCATTGCAGTGGCTGTGTCGCTGAAAGCTACAGCGGCGATTGCACTTCCTTTTGTGGTG  
TGGATCGGCATGCATCATTTTCGAGGATTCTTAGCCACCAAAAAGGGCAAAGACTCCCT  
ACCCTTAAGCAACAGGTCCCCGCGTCTTTTGCCACTGGAGCTGCAGGTGTTGCTGTCACT  
GGTGTGTTGTGCTAGTGCATCACTTGGGCGTCTGGCGCTTCGTGGGCTGGATCAGTGAG  
ATCAGTGGCAACAGCAAGGTAATCAACCCGCTGGCTTTCCCTTCTTTGGTGGCCAGTGTG  
ATCACCATGGTGGCTGAAGTGTTTCGTTGACGATTTTCGACTACAACGCAGTGGTTAATGTT  
GTGCGCTCAATCTCCATGCTGATCATGCTTGGCGGGTGGTTCGATGTTGGTGGCTGTTT  
CGCCAAATCGAAGCAGGCGGCTCACTGGTACAGCAGCGGCTTATGCCGTGGCTTTTGTG  
TTCAATTCTGTGACCTTGCCGTGGTACTACGCCAGCTTGATCTCTTTGCTCGGCACATTT  
AAACCACCGATGTGGTTGATTTCGCTTCGAGCGGGTGCTTCGCTGTTTATCGCGCTGATG  
TTTACCGGAAGTGAAACCACAGCTGTACAACATCGTTACGGTGATCATCGCAGCAATT  
ATCGCGTGGCTTGCCACCGTGGTGATCTTTGATGACACTGACCTGCAACAACGGCCACG  
GAGAAACCTCCCCGCATACCGTTTC

>RXN02697-downstream

TAGTTGCATAAGGTAAACCGCCA

RXN02720-upstream

CCACGCTGCACCATCGAAGACGAAGATCTGTTTTCTTACCGCCGCGAAGGCACGACAGGC  
CGCCAGGCCGCGTGGTGTGGCTGCCAAAGGAGGCATAAA

>RXN02720

TTGGAGCGCCGCGAAGAGCTGCAGGTACGACTGCAGCAGGTGCAAGCGCGTATCGACGCG  
ACCTCAACGAACACAACCGCCCCGAGGGCAGTGACGCTGTTGCCGGTCACCAAATTC  
CACCCCGTGAAGACATCAAGATCTTACAAGAGTTTGGTGTCACCGCAGTGGGAGAGAAC  
CGCGAACAAGAAGCAGCGCCAAAGCACTCGAACTTCCCGACATGGACTTTTCATATGATT  
GGCCAAATCCAATCAAAGAAAGCCAACCTCGATCGCCAGGTGGGCAGCTGCAGTGCCTCC  
GTTGATAGCGAGAAAATCGCCGAAGCATTGGGCAGGGGAGTAGCCCTTGCAATTGGATAGA  
GGCGACCGCACCAGTGACGAGCTTCCGTGTTTTATTCAACTGAGTTTGGATGGTGACCCG  
AGCCGAGGTGGAATCCATTGAGCCAGGTACACAACTTGCCGATTGCATCAGTGACACC  
ACACATCTGCGTTTTGAGGGCCTCATGTGCGTCCCACCGCTTGGTTGGGGCCCTGAAAAA  
GCTTTTCCAGGCAAGAGACGTACTTTCAGGTTTAGAGGAACACTTTGACAGGTCTTTG  
GAATTTTCGGCAGGTATGCTGAGACCTAGTTGCTGCGATTAAACACGGCTCAACAATC  
GTGCGTGTGGAACCTGAAATCTTGGGAACCGACCGCTAGCG

>RXN02720-downstream

TAGAAAATCAAGTTAAGGGTGTG

RXN02744-upstream

GCCAAACGTCATGATTGCTCTTTGGATACGGGACACCGCTCATTGGAAGATGTCTTCC  
TGGACATCACCGGAAAGAACTGAGGAGTTAACGCACACC

>RXN02744

ATGTCATAACCTTTTGAAGAACTCTGCGCTCCGCGGTTCTTCTCGATTCCAGCTGGAACG  
TTCACCCCTGCTCCCAACGAGCCACCCCGCAAAAATGTTGGCTGCTCAGGGCAAGATG

GAATCCCTGCTGTTTCTTCGCCACGGCGAACAGCAACTGCTCAGCATCATCATTTCCCTTG  
GTCGCGCTCATCGCACTAGCGAATTTTGATTTTCATCCCTGGTGAGAACTCCCTCGACAAG  
ACTTTCCCTTCGCGCTGGCCACAGCAGCCATGAGCGCTGGTTTTACAGGTCAAGCCATC  
AGCCTAGCTTTTGACCGCCGCTATGGTGCCCTCAAGCGCACCGGCGCCAGCGGTGTTCCC  
GCCTGGACGATTATTTTGGCAAAGTCATCGCAGTCATTGCAGTCACCATTTGTGCAGATC  
ATCTTTCTCGGTGTGACTGCACTGCTGTTGGGCTGGTCCGCACCTGTCGGTGGTGTGCTC  
TTTGGCATCGTGACCCTATTTGTGGGTGTTTCCAGCTTCACCGCGCTCGGCATGCTGATG  
GGCGGAACGTTGTCTCCGAATTGGTATTGGCACTGGCTAACTTGATTGGATTGTACTG  
TCCGGCCTTGACAGCATGGGCGGTCTTTTCCCTTCCGTCAACGCTGAAGGAGTGCTGTCC  
ATCATCCCATCCGTTGCGCTGTCCCAAGGTATGGTTGACGCATTCAACGGCGAACTTCCG  
TGGCTCCAGCTAGGAATTTTGGTGGGCTGGCTAATTATCACCGGCGTGGCCGCAACAAG  
CTATTTAACTTCTCTGCGAGCCGC

>RXN02744-downstream  
TAGATATACCTTAGTCGGAAAA

RXN02770-upstream  
TCGCCGGGGCAAAAACCGTATAATTACAGTCTATTACGATTCCGGGAAAGGCTGGGTAC  
TTCACACATGTTGTTTCGGAAGTCACGCAGCGCGTAATC

>RXN02770  
ATGTTGGTTGCAGCGTTAGTGATGACAAGCTGTGGTGATGGGGAACCGGAACCAACCAGC  
CACCAACAAGCCTTTTCGGCTACGCAGTTAACTCTTCGCTGGCTACAACCAACGCGCG  
TCGCTGTTGGGAGTGGCTAATGATGCTGGTCTTTGGCTGCCAGAGTGTATCCGGGTGTG  
TATGTTACGGGTCTTCTGGGCAGATGATTCCCAACACTGATCTTGCTTCCACGCAGGTA  
TTGCCGGGTATTAACCGCCAGGTGATTTACACTATCAATGAAGATGCCACCTACTCAGAT  
GGTCAGCCTGTGGTGTGTGATGATTTTCTGCTCTCTGCGACAGCTGGGCAGATGCCGAA  
CTGTTCCAGTCCCATGTGCCATTGACCTCGCAGATTGAGCGAGTGGACTGTGTATCTGGT  
TCTAAAGTAGCCACCGTGGTGTTCAGGAAGACCTCGGTGAGCGTTGGCGTTATCTTTTT  
GAGCAGGGCGATTGTTGCCAGCCCATGCCGTTGCTTCCAAAGCAGGTATGACCTTGGAG  
GAGCTTAATCAGGCGTTGAAGGATAAGGATCCTGAAGCGTTGACTGAACCTGCTCGTGTG  
TGGAGCGAAGGTTTCCAGCTGTCCAGTTTGATCCAGAGCTGCAGACGGCTTTTGGCCCG  
TACAAGGTGGATTCTGTGGGTGAATTTCGGCGAAGTCAAGCTGGTACGCAATGAGTTTAC  
AGTGGCGACCAGGCGGTGAAGCAGAAATCACGATGTGGCCTAAAGGCTCGGATCTCAGC  
GCCATTGCGGATAATGGAAACCTTCAGATCGCACATGTTGTGGCGTGGGAGAGCGAGCCG  
TGGGTAAATCGCGATGACCCATTGAATCCTTATGACATTAAGGAAGAGGTCCGTGTTTG  
ACTGAGCAGCTACCTTGGCCAGTGCCGGTGTGTTTTACGCTGCGGAGGCCCGGCAGGCG  
TTTGCGGCCCTGCGTTGACCAGGAAGCGGTGGCTGCGGCGTCGTCAAGCATCTCTGGAATC  
GATGTGCCCTGCCGTAGGTGTGCACTCGGTGCGTCACCAAAATCCGGTCGTGCACCAAAATC  
GGTGATCTGCCAGCACAGCACATGGCGGTGGATATTAATGCCGCATCAGCGTTGGCGGGT  
CAATCCATCCGATTGCGTACGACGACCCGATGAGCGCAAGGTGCAATGGTGGAGGCG  
ATTTCGCCAAAGTTGTGAGCCTGCCGGTATCACCGTTATCGATGCGTCGAGGAGGCTGTT  
AGTCTTAATGATCTCAGTCGAACCGAAGTCAGTGAATGGGGCTATGAGCAGTACTTCGAA  
GGGACACTTGACGCTGTTCTGCGTACAGTGGATCCACATCGGGAGTATGAAAATGCCAAT  
ACCATTTGGAACGTGATGCGGAGTCGACGAGGCGCACTGAAGAACAATTGTGGGCTGAAGTC  
CCATCAATTCCACTAGCAGCGCAACCCCGAGTGTGTTGTGATAGATCGCACAGTCCGTAAC  
GTTGTTGTTAATACAGACCTAGCCGGTATCGGATGGAACATGGACCGTTGGTCCAGAAGT  
GAGGAA

>RXN02770-downstream  
TAAGTAGTGAGCGAACAAGCTCT

RXN02781-upstream  
CTCCGAGAGTTTCCGCATCCGCGGTTTCGATCCCGGACGTTCCCCGGGAGACGCGGTGGGA  
CCGGCTGTGGCGGCCCTTCTGGGCGATACCGGCTGCCAGC

>RXN02781  
GTGGTCGCGGCCCTGGTTTTTCGGTTTCCTGCTTCCACGTGGGAACGTGGGTGTCCGAC  
GCCGCGCTCAAATTCGTTTGTAGGGTGGGCCTGATGCCGCCCCGAGGTGCTGGGCACC  
ATCGCCGCCTCCAGATCTCAGTGACCGGTCTCATCTCTCCATCACTCTCGTTGTTCTG

CAGCTGGTGAGCAGCCAGTTCAGCCCCGGAATGCTCAACGGCTTTCTGCGCAACCGCATC  
GTGCAGGCCACCTGGCGATGTTCTGGGGACGTTTCGTGTTCTCCCTGACGGTCATCCGG  
TACGTGTGGAGCGAGGACGAGGACATCACCGGATTTCGTCCCCCGTGCTTCAGTGTGCGGT  
GCCTTCTGCTGGTGCTCGGGTGTCTGGGACTGTTCTGGCGTTCATCCGGCTCATCACC  
TTCTCGATGCGGGTGCCAAACGCCATCTCCGAGATCGGGGAGGAGACGATGGCTCTGGCC  
GCACGTATCTATCCCGTGCAGAGCGACGACGACGAGGCCAGTCCAGGGGCCGGGCTGGTCA  
CCGCGGCCCCGGTGACCCCCGGAAGAAATCCGGGTGGGCAACCATGGTTCGCTGGTGTGG  
ATCGACTACCGGAAGCTGGTGTCTGGTTCGACGGAACACCAGGCGGTGATCACGGTCGAC  
CGGCCGGTGGGGGACTTCTCTGTCGAGGGCCAGCCGCTGCTGCGGGTCTGGTGGGACGGG  
GAACTCAGCGACCGGGACCGACGCGTTCTGCACTCGGCCATCGAGGTGCGGACCGAGCGG  
GAACTTCACAGGATGTGGCGTTTCGGACTGCGTCAACTGGTTCGACATTGCCGATCGTGCG  
TTGTCCCCGGGCATCAATGATCCGGCCACGGCGGGCCAGTGTGTCCAGGAGATCCACCGG  
ATCTTCCGCTATTTGGTTCACCGTTCATCGAGCCAGCCCCCTACATCGCCGATGACGACGGT  
CGGGTCCGTTGGTGCACCGAGCCGCAACGTATCGCGGACATGCTCTATGAGGTGATCCGT  
GAGATCCATCTCTACGGGGCGGATTCTGCGATGATTCCGAGGCTGCTGCGCACCATGGTC  
GAGGACCTGGTGACGCGCGCTGCCGATCATTCCCTGCCTGCGCTCGAGCGTGCCCCGGGC  
ATCCTGGACGATGAGACGGACGAGGACCGCGACAGTGACACCGCGAACGTC

>RXN02781-downstream  
TGATCCGGGATCAGGTGGCGGTG

RXN02782-upstream  
ACCCACCCGGTCCCCCTTTTTTCTCACTGACACCGGAGCCGCTCAAGCACACGCTG  
CAATCACAGAAGCTAGTTGAGCATATTGTAGAATATAACT

>RXN02782  
ATGCCAACACTGCTTATTGACACCCATCCGCATCTTGCAGCGCAACTTCTTGACCCTGGT  
TTAGGTGAACTTCTTACAGCCGGTTCCAACAAAAAGTGCAGTGGCAGTGCCCTAAGCAC  
TCCAATCACATCTGGACGGCCTCGGTTAATAACCGCACCAATGCAAAGAACCGCGCTGC  
CCCTATTGTGCCGAACACGAGTGTGGCAGGTTTAATGATCTCGCCACCACTACCCG  
CATCTTGTGTACAGCTGGTTGACCAAGATATTGCCGTCACCATTTCCGCTGGTTCTGGC  
AAAAGACAACTGTGGCAGTGTGTAGTAAACCCAAAACACCAGTGGTTGGCTACGCCAAAT  
AATCGCACGAGTACTAAATCTGCGAGTTCTGGTTGCCCCCTACTGTGCCAACCGAGCGGTA  
TTAGTCGGTGACAATGACTTTGCAACAACCTACCCCGAACTTGCAGCGCAATTAGTAGAT  
CAATCTGCAGCGACAACCTTTACAGCCGGCCACAACAAGCCTGTTGAGTGGATCTGTTGC  
AAGCATGAACCACCATTTATCTGGAACCTCACCAATTTTGCCTGTACGACAGAACACC  
CAGTGCCCTGTGTGCTCAGAGCGAACTGTGGCGCCGGCGCTTAATGATCTTGCAACCACT  
CACCTAAACTTGCCGAGCAAATTGCAGATCTCAACCAAGTGGTGTGAGCGCCGCGGCC  
ATTATCCCCACCATTAGCAGGGGTTCCTACGCAATTAACATGGCAATGTTCTAAAAAT  
CATGACCACCAATGGGTTCGCCACAGTAAAGGATCGTGTTCGCGGAACAGACTGCCCCACC  
TGCGCAAATACAGGAACCTTACGCAAGAGGCTGAACCTATTGAGGTTCATCCGTGCATTA  
TTCCCAAACACTGATGTCCAGCAAGGTGCGCTCATTAATGGACGTACCGGTAATCAAGGT  
GCATCGCCGTCAACCGATGTACTCATACCGTCCAAAATCTCGCTATCGAGTTCAACGGC  
CTGTACTGGCACTCTGAGCTTTTCATCAAAGATAAGCATTATCATGCGAACAATCAGCT  
CTCGCAGAACAAAGCCGGTGTGACGCTCATTCATGTGTGGGAGGACGACTGGAATCTTCGC  
CGCGACATTGTGATCCGCATGATCGCACACAAGCTTCATGCAACCCATAACCTCAGTGCT  
GTTTTGCCCTACCGAACTACTGACTACGCTGTGGCAACCAACCGCTTCGCGGTACACTCA  
CACTGTCGGTGGTCTCTGGTTACGCGCTGCTGCATTCT

>RXN02782-downstream  
TGAACAGCAACCATATTACGGGT

RXN02812-upstream  
CGCAACTGGAGCTGCCGACTCCCCTGCGTTTGCCACCGTTGAAGGAGCAGAACTTCCAGA  
GGGCTACACCTTTGAAGCAGTAGACAGCGCAGAAGTACCT

>RXN02812  
GTGTGGGCTGTTGCCATCAACGCTGGAAACGGTATCTCTGAAGACCAAGCCGCGCCGCC  
TCTGATTTAGTAGCTTACGCTTCGACACCGGCAACGCCGATAACTCCGCGCTTGAAAGT



GTTCTCACCCAAGCTTCAAGCGAATCCGCGGCAGAACTACTGAGGCGCAACCAAGCGAG  
 ACCCCGGTTCGAGCCCGCGCTGCTTCCCCATCCGATACCATCATCAACCTGGATACCTCA  
 TCCAACATGGATCGAGTTGTTGACGGCAGCCAGGAAACCTACCACACGGTTACTTCCCGG  
 ACTCTGGCCAACCTCGCCCGCGAACTGGTGCACAGGGC

RXN02817-upstream

AAAATTCCCACCCCAAACTCCCCACTTCGGTTAAGGAATCAGGATTCTCACAAAGTT  
 CAGGCAGGCTCCCGCTACTTTTCAGCGCTAATCTTGGCTC

>RXN02817

ATGATTTTAGGCGTACCCATTCAATATTTGCTCTATTTCATTGTGGAATTGGATTGTTCGAT  
 ACCGGTTTTGATGTAGCAATTATCCTGGTCTTGGCGTTTTTGATTCCACGTATCGGCCGA  
 CTGGCCATGCGTATTATCAAGCGCCGAGTGGAGTCTGCAGCCGATGCGGACACCACTAAG  
 AACAGCTCGCGTTCGCCCGCGTTGGCGTTTATATCGCGCAAATTGTGGCGTTTTTCATG  
 CTTGCCGTCTCCGCGATGCAGGCTTTTGGTTTTCTCTCTCGCGGCGCTGCGATTCCGGCA  
 ACCATTGCGTCAGCTGCCATTGGCCTTGGTGCAGTCGATTGTTGCGGACTTCTTGGCC  
 GGATTTTTTCATCCTGACGGAAGCAATTCCGGCGTGGGT

>RXN02818

TCCTATTCCCGGAAGTTTTTGACCCAGGTGTGGATTTCGAGACAATGTCGGCGATTATAAA  
 GGCCTTACCGATACGGCGTTCCGTAAGAAGCTGCAGCGCATCTTGCCCTACCTGCGCAGA  
 GTTGGCGTTCCGATTGAGCAGTTTCACGGTCACCTCAGGCATAGCTGAAGGCCAGCAGGCG  
 TACCGTCTGGCCCAGGATTCTTATAAGCTCCCCGAGGTCGAATTCACCCAGATGAGGCC  
 GCCGTGCTGGGCATGGCAGGGGAGATGGGCCATAATCAGGAACTCGGCGCCTTCGCGCGT  
 TCGGGGTGGACCAAATTGGCGGCCGCGCGCGCAGCGTGATCTGTCCACGTCCACAGCC  
 TTGACCAATGCGGGCGATTTAGGTTCCCTTGCTGCAAAAACCTTCGATGCGATCATCAAA  
 GCGCGCAATTGGGCAAGCAAATCAGCTTCGAATACCGGCGCGCCCCCAAAGACGCCCCC  
 TCGCTTCGACACATGGATCCTTGGGGTCTGGTCCCTGAGCGCGACCGCATCTACCTGGTC  
 GGATTTCGACCTCGACCGCAAGAAGCACGCACCTTCCGCATCACCCGCGTCCGCAACATC  
 AAATC

RXN02825-upstream

TGGCCTGCCCCTGAACTTTTACGGCTTTCAGAGCGCAGGGCATCATTTTCTTGTGTGCG  
 CAACACTTGAGAAAAATTGCGGAAAAGGACACTGCTGTTC

>RXN02825

ATGAAACTTGACCTCGTATGCGGATGAGGAGCCCCAAACTTTTCGCGGCCCTCGCCTCA  
 CTTGCTTTAGTCATAGGTCTCGGCCAGGTACCGATCGCCCAAGCTCAAACCGAGTATCGA  
 ACCGCCTCCGACGGTTCCCTGAAGTGGGATTAGGCAATCGTTCCGCAATTACATCCAA  
 ACCGGCGTGGCCAAAGGTTCCATCACGCTTGGCGACGGCGCATCCGACAACGGTGGCAAC  
 TTCGATTACCCACGCACCAACGGCACCCGTGACCAGCGATTCCCAAGGCACCGTG  
 GAATTCAACGGCTCCGTGCACTTCCTCGGACACCAGGCAGAGGACAAATGGATCCTGGAC  
 ACCACCATGTCTGACATCAAAATGGTGTTCAACGGATCCTCCGCGCAGCTAGTTGTGGAT  
 TTGGTTGCCCCGGAATTCAAGGGCACCACTACGATGACATCGGCGAATACATCATCTCC  
 GACGACATCGTGCTTGCCGACGTCTCCCTCAACTCCGCCGCCGACTTCTCCCAAGATTCC  
 ATCGACCTGTCCGGCACCAACCGACCTACCGCAGCTGGCGCCCAAGCTTTCGGAGGATTTC  
 TACGAAAACCGGCGAAGCCCTCGACCCGACCGGCGCAGCCTGACCATTTCCTCCACCACC  
 ACCGCGCCATCGACCAGCACGACCTCCACCTCTGCCTCAACTTCCGGTGGAACCGCCGAC  
 TGTTCCTCCGGCGCATTTGGGTGTTGTACCAACCGGAACCAACGACGGCATGCTGGGCACC  
 ATCCAGGAAGTAAACAACACCTTCGCGATTGGAACAACCTCATCGTCAACACCGAGCGC  
 ATGTTCTGCAACATTGATACCTCAAGGCGCGCTTCGACACGGATGATTCCAGCGATTCA  
 GCGACCTCTGCGACTTCTGGGACTACTGCGTCCACCGGCACCACCGCTGCAACTACCGCG  
 GGAACCACGGGTACCACTGGAAGTCCAGCACCGCTTCCGGAATTCCGGAATTCCGGA  
 ACCTCCGGCACCGCAGCAACTGTGCTGGCACCAACCCCAACTGACAATGGCGTTTGCACC  
 GCTTCCGGATCTTTGGGCGTGACCCAAGCATCTGCGCAGTGGGGTGTGAAGGCGTCCTTC  
 CAGAACTACATTTCGCGGATCGATCGCCAACGGTAGCTGGACTCTCAACGGCGTTGGTTTT  
 GATAATCAGCAGTTCCAATTCTCTGGAATTCGGGAGCAGTCGACGCGGAAAACAAGACC  
 GGCAGCATCAATTTCCCTGGTTCATCCACTTCACGGGTACGGCGGAATCTTGGACATG

CAGATCGCAAACATTGAGATCAGCTTCAACGGCAACTCCGGCGAGCTGATTGCGGATGTC  
GTTTCCTCTGACATGGATGGAAATTCCACCAACTACGGTCGCACTGTCGTGGGCACCCTG  
AACTTCTCTGCGTTGAATGTTCTGCAACGGAAGCTTCCGGTTCCGCTTCGGTGTCCCTG  
TCACAGTCGGGTTCGCGAGGCGTTCGCTGATTTCTACACCCAGGCACCCAGTTGGATCCG  
ATCAGTTTCAGCGCAACTTTGGGCGGCGACGCCAGCTGCGCCACCGGATCCACCTCGACC  
ACAGGCGCTGCTGCCACCGCAACACTGACAACACCGAAGGTGTTGCCGGCGAGGAATCC  
ACCACCCCGCTAACCAAAACAGCCAGTTCCAAATCCGCCAGGCCGCTGCAGATTCCACC  
GGACTGGATACCACCACCAATGTTGCTCATCTCGCGGCGTTTCGTTGTCGCAGGTGGC  
TCCATGACTCGCTTCACCGTCGGCAACCCGACTGGAAAA

>RXN02825-downstream  
TAAGGCTTCACATGAATAACGCT

RXN02838

AACACGGGCAAGGGCGGGGGGCTGACGGTGCCGCTGGGCGACGGGCAGGGGCGGTATATC  
GCGAAGTTCCCCTCGACCGCGTTTGTGGGGGTGTCGGAGAACGAATTTGCCAATCTGGCT  
TTGGCCGAGGCGATCGGGATGGAGGTGCCCGCGCGAGTTGGTGGGGCGTGCAGTTT  
GAAGGCGTGCCCCCGAGTTTGAGGCCATGACCGACGGGTGGTTTTGCTGGTGCGGCGG  
TTTGATCGCGCGGGCGATGGCGTGCGCTGCATATGGAGGATTTTCGCACAGGTGTTCCGGC  
CTATACCCCGCGCGCAAGTATGATGGGGCGGCCAGTCACGATATTGCGGCGGTGCTGGGC  
AGTGCGGTGTCGATCGCGGCGGGGTGGAGTTTCGTGCGGCGGCTGGCGCTCTCGGTGTG  
ATGGGCAACGGCGATATGCATTTGAAGAACTGGTCGCTGATCTATCGCGGGCGGGCGAT  
GTGCCGCGTTGGCGCCTGTGTATTATATGATGTCGACCGTGACCTAT

>RXN02840-upstream  
AAGTGAAATCAATCGGCTTTTCCAGCAGCAGCACTGGTCGCGCCAGCGTGGGTGTTATGG  
TGAAGGCGAATACACCTTCAGCACCGCTGAGCCGGAAGAG

>RXN02840  
ATGACGGTAATCAGTGCGCGCTGAATGTGTTACTGCCTGACGCGACCGACTGGCAGGTG  
TATGAAGCCGGTTCGGTGTTTAAATGTTCCCGGTCACAGTGAGTTTCATCTGCAAGTTGCC  
GAACCCACCTCTTATCTGTGCCGCTATCTG

>RXN02840-downstream  
TAATTCCTCGCCTTCCCCCTTGAA

RXN02841-upstream

CTCACATAACTTTACGCCACCCCATACCCCTTTAACCCCTGCACTGCTCATCCACAAGCAC  
TGTGCAGGGGTGTGTGTTTCTAACAAGAAAAGAGACCACC

>RXN02841

ATGTTACAGCTTTTAAAAGCAATCCTACGACCATTAAAAAGCTGGTTTCTGAGCTCATT  
AATGGCGACGATGCAGCGCTCAACGAAGTAGAGCGACACGTCACCTAATGAATCAGTCCGT  
GCTCGCGAACTCCCTAATGTCCAGTACAAAGCCACTGCGGGGCGCAACTTCGCCATATCC  
AAGCTGGTCCAAAATTTGCGTTCGATCAACAAGGCACAAAACAATCCACGTGGTGTGCCC  
ACTCATGCCACCGTGATTCTGCTTAAGGAAGACGGCAGCTACGACGGTGAAGAACAGTGG  
CGCATTTCCAGAAAAGGCGATCACTCCGTTTCGACATGCTACGTTTCGCCCTGACTTCAACCAC  
AACAGGCTGAAGAACCGGCCGCTCATGGTTCGAGTCCCAATACCCCTGGGGCGTCCCCGGA  
CTCATTTAAATGAAC

>RXN02841-downstream  
TGATCAATCCCTGACACAGCCAT

RXN02846-upstream

TACAAGCGCTGAACGTTGAGTTTGGTCCATTGAGGGGTAAAGGCTTACCTCTCG  
ACTAGGTGGGGTGGGCGTAGAGCGCCTATTCTGATTGATC

>RXN02846

GTGTTAACCATCGCTATTGTACTTCTCGCGTCAGTCCTCATCGGTGCTCTTCTCCAACGC  
ATGACAGGATTGGGCGTCGGTCTAGTTACCGGCCCAGTCCTGACTTCTTTGTTAGGGCCG  
CTAGCAGGCGTGAACCATGGTGAATGGTCTGTCCATCATCAACGCGGTGAATAATGCGTGG  
TCGGTGCGCAAACGCACTGACTGGGCCAAATTCCGAATTCTTGCCGGCGCTTTGGTGCTT  
GGTTCTGTTCTGCTGTTGTCAGTGGTGTATTTCTTAACGGACCATGGCTGTTGATTTTC  
GTTGGTGCGATGGTGCTGCTCGCGTTGGGTGTTTCCCTGTTCCCAACAGAGAAATTCGCA  
CTCAAGCAAGAAGCTAAACTGCCATATGGTTCATCTTCGGCATGATTGGTGGATTCATGTCC  
ACTGTTGCAGGCATCGCAGGGCCATCCCTGACTGTTTATGCGCGCCTGAGCCGCTGGGAT  
TACCGCGACTTTGTGGCCACCTTGACCCAGTTCTACTCGTGGCCAACACCGTATCGTTC  
CTGCTCAAGGTTATCTTGATCGGTGGACTCGATTTCCGTGGCGCACCCGCATGGCTCTGG  
ATCGGTGCCGTAGCGATGATCTTTGTCCGTGCTTGGTTGGGTGAAATCGTCAACGCTAAG  
GTGTCCACCCCAATGGCCAAGCGCATCGCTACGCTCCTGGCAGCAGCTGGTGCCGCAGTG  
GTGTTGTTCCGAGGCATCATGGAATTGGTT

>RXN02846-downstream

TAGCGGTCTTAATTGGTGGGAAG

RXN02847-upstream

ATATCGCAGCAGCCTCGATGGTCAACGCCCATATGATGGGAAGTTG

>RXN02847

TTGGCGCTAACCGCCAGAGGCTTTCTCAATTCTGAAAGAAGCCAGACAAGGTGGAAAACC  
CACTTCACCACCCAGAAAGTTCCACGCTCCGGCTACAGATATGACCTCGATGGGCTCCGC  
GGCATCGCGATCGCCTTCGTAGTTTGTTCATGTTTTCGTGCGAAAAGTCTCCGGCGGT  
GTGGATGTCTTCTGCTGCTGCTGGCTATTTCTTCTTAGGGTCGCAATTGCGTTATGCA  
GATCGTCCAGATTCTTCCATCAACCCCTGGTGGCCGATTTGGCGCACGCTACGCAGATTA  
CTTCTCGCTTAGTGCTGGTGTTGGGCGTTTCCATGGTCTCATCTTGGCGTGGGTGCCC  
AGACTGCAACCAATAGAAATAGCCAACCAAGCAGTAGCCAGCCTCTTCTATGTCCAAAAC  
TGGGAGCTCGCATCCCAAGGTGCTGCCTACGGAGCAGCCTCTGCAGAAGTCAGTCCTTTC  
CAGCACTTGTGGTCCATGGCTGTGCAAGGGCAGTTCTACCTCTTTGCCATCTTGTGAGC  
ATGGCGATCATCTGATTCTGTCGATACCGCCCCGAATACTCCGCAGTGGCGACTAGCGACT  
CCTGTGCTGGCAGTGCTCACATCCGTATCATTTTTTCAGTGCAATCCTGTGGCATTTCATT  
GATCAATCAGTCAACTACTATTCCACCTTACCAGGTTCTGGGAGCTCGGCCTTGGTGCA  
CTATTGGTGCTGCATGCGCCTCGAATTTTGATTTCTGCGAAGACTAAATCAATACTCGCA  
GCCGTGCGTTTGTATTATGGTGCTATCCACTGGATTCTTCATGGATGGCGCAGAGACTTTC  
CCTGGATTCCCCGCGCTGTATCCCATCTTGGGTGCTTGCTTAGTCATCCTTGGCGACGGT  
AAAATCTCGGTCTTCTCTCCCCGAAAATGGATGCTTTGGCTCGGCGATATCGCCTACCCG  
CTCTACTTGTGGCACTGGCCTCTGCTGATCATTTTACCAGCTTTGTTCAACCAAGAAGAG  
CCATCCATCTGGCTGGGTATCGCCGTGATTATGCTGTCCCTTGGCTTGGCGCAGCTGACT  
AACAAATAC

RXN02849

TCCCCATACCCCGTCATGATCAGCACCTCTGCCGACGCCTCAAACGTGACCGTGCGCATC  
ATGGGTGTGGACACCACCTCCGTGGAATCCATCAACAACGGACGTTGGTCCACCACCCAG  
CCCAACACAGTTCGAGTATCGGGTTCAGATTGTTGTGCCATCAACCGGTGCACCAGGATTT  
ACCACCTCAGACACCCGAATCATCAGCGATCTTCTGGCAACGAAATCACCAGAGAAACC  
GTCACCACGGTTTACGATCCTTACCAAACGTGGTCTGCTCC

>RXN02849-downstream

TAAAACAAAATGCCCCACCAGAT

RXN02911-upstream

ACCGCATACATTAACGTGTTGATCATTTGCCCTAGTATGCGCAGTAGCGGCTGCTCTGATC  
AGCAGTTACCTTTTCCGCGGAAATCCGAAGGGAGCCAATA

>RXN02911

ATGCGCACTAGTAAAAAAGAGATGATTCTGCGCACGGCCATCGATTATATCGGCGAGTAC  
AGCCTCGAGACGCTGAGTTACGATTGCTCGCCGAGGCGACCGGTCTGTCCAAGTCGGGC

TTGATTTATCATTTCCCCAGCCGCCATGCGCTGCTTTTAGGCATGCACGAGTTGCTTGCC  
GACGACTGGGACAAGGAATTGCGCGACATAACCCGCGACCCAGAGGATCCACTTGAGCGA  
TTGCGCGCCGTCGTGGTTACGCTTGCTGAAAACGTTTCGCGCCCCGAGCTGGTTTTGCTT  
ATGGACGCCCCCTCCACCCGGGATTTCTTAACGCCTGGCGCACTGTAAATCATCAATGG  
ATCCCCGACACCGATGATCTGGAAAACGATGCCCCACAAACGCGCGTCTACTCTGGTGCA  
GCTCGCAGCCGATGGCCTCTTCGTGCACGATTACATTCA

>RXN02911-downstream  
TGATGATGTCTCAGCAAGTCCA

>RXN02914-upstream  
TGTGGATCGCAGCAATTGCATCCCCTGGGCCAGACCTTTTCAGATCATCAGGCTAAGTGC  
CAAAAACCGCCGTGATGGCGTACTGACTGCCGTAGGCATC

>RXN02914  
ATGGTGGGAAACTCCATCTGGATCATAGCCAGCCTCCTTGGGCTCTCGGCACTGATCTCC  
ACGTATCCAGCAATTTTGAACCTGTTGCAGCTCGTCGGTGGCGGTTATTTGACCTGGATG  
GGCATCGGGCGGTGAGGTCATGGTGGACGAAACGCTCCACACAGCAAGCTGCAGCGGAT  
TCTCAAGCTGTAGAGAATACGTTGGTGACAGCCACGGCTGCATCTGTCGGAGTGTGGCCA  
GCTATTCGATCTGGCATTGCTACCAACTTGTTCCAACCCCAAAGCTGTGCTGTTTTTGGT  
TCCGTTTTTCGCCCAATTTGTTAGACCTGACATGGGAATCGGGTGGAGTATTTTCATTGGA  
GTCTTCTCACCCCTCACTGGCCTGCTGTGGTTTGTGGGGTTCGCCGTCTTGGTCCGCAAA  
CTAGCCGCTGGCCTCACCCGAAATGGAGCCATCATCGACCTGCTAACGGGGGTGATTTTC  
ATCGGGCTGGGAATGTTTCATGATCTTCGAGGGGGTGTAGGAATCGGTGGCAGGGTAGTG  
GGT

>RXN02914-downstream  
TAGCCCCGCCCCCAGGACGTAC

>RXN02921-upstream  
TGGAAACTGGGAAGGGTTGACGTTGCGGAATCTCTCCGCAGCGTCGGTTCGGACCCTAA  
AAAAGGGTGAGGAACCACATGAGCTGTTTTAAGGAATTTT

>RXN02921  
GTGTCTGCACTTGAAGAGTCGATCCGCATCGCGACCATCGCGGCGAAAGCAGCGGATGAA  
AAGAAGGCCGATGACATCGCTGTATCGATGTCTCTGACATGATCGCAATCACCGATTGC  
TTTGTGTTGTCATCTGCTGACAATGAGCGCCAGGTGGGCGCCATTGTTGAGGAGATCGAA  
GATGAGATGACCAAGGCTGGTTTTCGAGCCTAAGCGCCGTGAAGGCAACCGCGAAAAACCGT  
TGGGTTCTCCTTGACTACGGATTGGTTGTTATCCACGTTTCAGCGACAGGCAGAGCGCGAG  
TTCTACGGACTGGATCGTCTGTACCGCGACTGCCCACTCATTGAAATTGAAGGACTTGAA  
ACCTTCAAGCGTGAATCCTCCTGGTCTGATGAGGCGGATATCCGCAACATCGACAGCATT  
GATGAACTCCACCTTTGCCAGCTGAATACGAGCCTGGCTACGAGGACGAT

>RXN02921-downstream  
TAAGAGGTAGTCTGTGACTCGT

RXN02924-upstream  
CTAGGCAGGTGTGCGATCAAACCACACTGTCAGAATCAAATCTGCTGGACGCTATGCCAG  
CGGATTGTTGATCACGAAAAAGCATGTCACAGACACCTTT

>RXN02924  
GTGCCCTTCTGTAGCATCCATCTCAGAGCGCGCCACGTTTATTCTCACCGCCGATCACTTT  
TTGCGCAGCTGCTCGAAAGTAATTTATGTCCGGGGCGAAAATTTACCGCCACAGCAACC  
ACCAGCCTGTCTGTATTTGGCACAGATCTGGGTTTGATCAAATTAGACGGCAAAGCCCC  
ACCATGCCACTTCCACTTTTTCGCAGATAAGCCACTTCGCGTGGGCATGAAAAACCACAG  
TTCGGATTTCGGCGGTCTGCCATCAGCCACCGTTGCTAAAGAAATCCACGGGCGCGTTATC  
TCTGCCATCCCCATGGCGTATCAAGAAACCGCATCACCCGAGTCCATCACGGTGCCTTG  
ATCTTTAACTCCCCAGAAAAGGCAGTAAAGGGAGACTCCGGCGGACCTGTGCTGGTTAAT

GGACGAGTAGCCGGAATCCAATCAATGATCTCTGACCCCGGTGGATTTAACACCGGGGTC  
GCCACTGCCGCATCCCTTATCCAGCACATGCCTGCCCTAGCTCAAGCGCTTGAAGTCTC  
GAACATAGC

>RXN02924-downstream  
TAGCTCGCTAGGAACCGATCGCC

RXN02927-upstream  
TCCGCAGTTGGGCCTGCTTGACGCCAGATCTCAAGTGTAAGTTTCATTACTTGTAGTTCC  
TTGTCTGCAGTGGGACAGATTCTGAAGAACAGTGGTTCTGC

>RXN02927  
GTGGCAGACGAAGGTTCCATTCTCGCCTGGTTCCCATGCGGAGACGAAGCACCAGTTTTG  
GTCGTCACGTTGTGCTTCGCCATCTTCGGAGAGGTGGTCGTCGCGGAAGTGAGCGCCACA  
GGACTCGTCGCGGTCGAGGGCGTCGACACACATGAGTTCGCCGAGGTCGATGTAGTCGGC  
TACGCGTGCTGCGTATTTCGAGAACCTGGTTCATCTCATCGGTGCTGCCGGTGATGCGCAT  
GTTCTTCAGAAAGTCATCGCGGAGGGCACGGATCTTGTGTGATGCCATCCTGGAGGTCTTC  
TACGTTTCGGGAAACGCCACAGGAGAAGTACAGGATATCGCCAAGCTGGCGGTGGTAGTA  
CTCAGGTCCGTGAACGTTGTACCCGACCCACTCTGGGCGGTTGCCCATGAGGCGGTCAAT  
GCGAGCCTGTGCACGCGCAATCGCTGCCTGTGCTTCTGGTGCATCCTC

>RXN02927-downstream  
TGACAGACGCTCGGAGCCAAGCA

RXN02928-upstream  
GGTTTGCACCGTGGTAGGTCCAGGATGCTTCGCCTGCGCAGAACAGACCTGGGAGTGACG  
TCATTTTCGTTGAAGTCAGTCCAGAGGCCACCCATGGTGAA

>RXN02928  
GTGGCAGGTGCGGTGCAATACGCATTGGGCTGGAGTATGGGTCTCGCCAATTGCCTCTTC  
GTACATGGTGAAGAGGTTGGAGTAACGCTCGCGGATGGTGTCTGTCCGAGGCGCTCGGT  
GGCGTCGCGGAAGTCCAGGTATGCAGCGTTGTTTCAGAGGTCCAACACCGAGACCAGCATT  
GATCTGCTGGGAGATCGCACGGGAAGCAACGTCACGTGGGACGAGGTTACCGAATGCTGG  
GTAGCGGCGCTCCAGGAAGTAGTCGCGCTCATCCTCAGGGATGGTGTGTTGGATCGCGGTT  
ATCGTTTCGTTCTTTAGGGGACCAGATGCGGCCGTCGTTACGCAGCGACTCGGACATCAG  
AATGGTCTTGGACTGCCAGGTGGAGTTACAGGCAGGCCGGTTGGGTGGAAGTGGATGAA  
CGATGGGGACGCGAAGTATGCGCCGGCTTCGTATGCACGCATGATGGCCGAGGCGTTGGA  
GTTCTTGGCCAGGGTGGACATGTGGTACACGTTGCCGTAGCCACCGGTTGCCAGGATAAC  
GGCATGGCCGGTGTGTGCGGTGAGCTCGCCGGTGATCAGGTTGCGCATGATCAGGCCTTC  
GCAGCGCTTTTACCGTTACGTTCCGGTGACAAATGACGTCAACCATTTTCGTTATGGGTGAA  
GATTTCTACGGAGCCGAGGTGGATCTGGCGCTG

>RXN02928-downstream  
TAGTGCGGATGCGGTGGAGAACT

RXN02931-upstream  
GATGGGTGCAGAAATTGAATTGAAAGAAATCCGGGCACATGTGGGTGGAATCCCCGAGTGA  
CTAGTGCGGTGTAAGAGCACTAGACTGTTCAACTATGAGC

>RXN02931  
ATGCAACCATAACCCCGCAACCCAATCGAAAAACGTAAGCAAGAAGTACGCAAGAAGTCC  
CGCAACGCAGTTGTCTAGTGTGGCGGTGGCATCGTAGGCGGTGCGGCTCTGTGGCTAGTG  
TTCGGCTCTGCATTCTTTATGGGACTTGGATTGATCATCGCCGTGGTCCGGCGGTTTTTAT  
TACTACAACAAGGTCCAAAAGATCATTAACGAAAAAGACCGTTAC

>RXN02931-downstream  
TAGTTAGAAATCTATGTCAGACA

RXN02932-upstream

CACTACTGCGTTAAGGTATGAAAGTTCGCACACCAGCGATTTAATTCTGTGCCCACCACT  
AGCACGACCATTTCAGTTTTAACTTTCTTGGAGTTTTCTA

>RXN02932

GTGTCCAAAACAGAAGAAGGCCGTTTCAGCGGCCATAATTATTTACGCGTTTCCAACTTTC  
ATTCTGCTGGGCGCGATCATTTGCGTTTATCTTCCCGGAACCATTCATTCCGCTGACAAAC  
TACATTAATATCTTCCTCACGATCATCATGTTACCATGGGTTTGACCTTGACGGTGCCC  
GATTTTCAGATGGTGCTTAAACGTCCACTGCCTATCTTGATCGGTGTAGTAGCGCAGTTT  
GTCATCATGCCATTCTTGGCGATCGTGGTTGCGAAAATGTTCAACCTCAACCCAGCACTC  
GCCGTTGGCCTTCTCATGCTGGGATCCGTTCCGGGTGGCACCTCCTCCAATGTGATTGCG  
TTTCTCGCCCCGAGGAGATGTCGCGCTATCGGTCACCATGACCTCTGTGTCCACCATTGTT  
TCCCCAATCATGACGCCCTTTCCTCATGCTCATGCTGGCAGGTACTGAAACCGCCGTCGAT  
GGTGGAGGCATGGCGTGGACTTTGGGTACAAACAGTGCTGCTGCCGTGTGATCATCGGCCTA  
GTTCTGCGTGTCTTCTTGAACAAGTGGATCGACAAGATTTTGCCGATCCTTCCTTATCTC  
TCCATCCTCGGTATCGGTGGCGTGGTGTTCGGCGCAGTCGCAGCCAACGCGGAACGACTC  
GTGTCTGTGCGACTCATCGTGTTCGTTGCAGTTATCGTGCACAACGTACTTGGATACGTT  
GTGGGATACCTCACCGGCCGTGTATTCAAATTTCCAGAAGCAGCAAACCGCACCATTGGCG  
ATTGAAATCGGAACCCAATCCGCAGGCCTCGCATCGGGAATGGCAGGACGATTCTTCACC  
CCAGAAGCAGCCCTTCCAGGTGCTGTCGCTGCCTTGGTCCACAACATCACCGGCGCAGTT  
TATGTTGGGCTGGTACGAAACAGGCCTTTGACTAAGGCATCAAGGAAGAAGGAATCCGTC  
GCGGTTTCCAGC

>RXN02932-downstream

TAACCTTATTTGCTGCCCCGTTAGA

RXN02934-upstream

TGGATGGGCCGTTGGCGGTGACCATGGTAGATGCGGATTCAAGCTGCCAGGCGCGCTCAT  
TGAGTGGCTGGCCGTAGTAGATTTCTACAACCTCCGCCGGC

>RXN02934

GTGGGTGCAGACGAATTCGATTTTCATCTTTGAGATTGATGCGCCAGAAGCCGGATTTCGCG  
CTGGTCGACGCCGGTGGGGTTTCTTCTTCGTCGAGTTTCCACATGCGGGATTTCGAAGGA  
GAGGTAGTTTTACCGTCGTGGGCGAAGGTGATTTGCTGGCCGAATGCGTATTGTCCGTC  
TTCTGCGGTGTCGGCTTGGCCTTCCGCCGCCAGACGCCGACGAGAGGGAGGAGCGCGAG  
GAGTCCGTGCTGGAGGTTGGGGCCTTCGCGGAGGTTAGCGGTGTCGTCAGGGATAGGAAG  
GTCACC

>RXN02934-downstream

TAGGCTTGGGATGTTGCGGTGAG

RXN02936-upstream

ACCAAGTTCAGACAGCTCTGGGTTGGACCTACCGGAGTAAAGGCGTGCCACTGACATAGC  
AGTTTGGCCGTGGCGAAGCAACAAGAAACGAGTGGGATCT

>RXN02936

GTGGTTGCGCCGTTCCAGTTGGTGGGTTTGGTTTTCGGTGCAGTTGAGGTCTTCTTTCTCT  
GAGCCCAGAACCGAAGAAGCAGAAGATACAGAAGCAGAATCCCCCTACAACACCTACCGGC  
TTACCTGCCGCTGCAGCATCCATCGCCACGTTGGACAATGCGTCAGCTCGTTTTGTTTTCT  
TCACGCGGAATCCACGTA

>RXN02936-downstream

TAAGAAACGGACCCGATTTCCGA

RXN02939-upstream

CTTCGAAGAAGACGATATCCCCCTACGAAGTCGACGTGGATGACTTATTTATCCTCGGTGG  
CTTAGACAACCTTCATAAATCCCCCTTGGAGTGATTGAGATA

>RXN02939

ATGAATCTCCACTCCTTAGAGATTCGCCAAATTTTCATCCGGCACAATTTTCAGAACGAAAA  
 ACTTGGATCTTTCCCACTGCTGCTCATTTCAATCAAAATCTAGTACACCCGCAAAGC  
 ATTGAAATCGATGCACAAACCGCGTTATTTTGGCTATGGAAAACCGACTACAACGTACC  
 GAAGTTGAATCAGTAGAGTACCCAACGGATCTTCCTAATCCTGCATGGACAGGTCCAGCC  
 ATTTCTTGGCCACTAAAAGACCCATCAATCGATTTCCCTGACCCGCTCCCCCACAGCATT  
 TCCGAATTACCACCTCAATCCGATAATCCTCGGCATTTGCGAGTATCCATCAGCTTAGAT  
 GCAGTGAAGGTGCTTTTCCGCGCTACCGGATCGGAGATTCAATACGTATTCGCGTTGTC  
 TTTGCCCGGGACACGCCCTTCATGTCCGGCTTAGAAACAACACGTCGCGCCTGGATTGAG  
 GCGGCCACGGAAATGGACATCCATAACACATGGCCCATATCCTCACCAGTGACGGCTGG  
 ACTGCACTCTCTCATTCAGACAAACCAATACGCCACGAAGCCGAGTTAAAGGGATGGTTT  
 TTCCACGATTTGTTGCGCAGTGAAATGCCCTTGACTGATCTGAAGATTGAACGAATCTAC  
 GGAGGCCTGGGTACTTTTCGACAGCGGAGCCACCCGGTGGCAAGAACTCACAGACACAGAT  
 GATGCCTACACAGAAAATGGCAGCTGGCTGTTGGAAGTTATCGTCGATGCCACCCCTTGAC  
 GGTGCAATTCCACCACCACTTCAGCCACAACAGTTTGAAGCATCCATCACTCACATCGTC  
 GATGAGCAACTATGGGTCTTGGGCAGATGCTTCCAGTTCTACGATGCTGGGATCTTGAA  
 ACCGGAATAATACCTGGGGCAAACCTATGTACCTATTTTCGGTTTCTCATAGTTCTCGGCTT  
 CAGTTTTTCGGAAGGGTTGATTCACGATTATGAAAATGCCTGGTTCGCTGAATCCTGGGGTG  
 CGCATGCTTGGCGAGCCACAGCCGTGGATAGAGCCTGTCTTGAATCGACGTTCCAGCG  
 CCATGGGAATTACAAGAAAGCTTCCCGATGGGCTTTACTCCCTAACTGATGGAGAGCAA  
 ACAGCACTGGGTGGAAGCACTCCAGCAGGACAATTGGAAATCTGTGTAATCAGCAATGAC  
 GGATCCAGGATCTTAAACGCGAGGCGAGTAGAAGACCTGTACTTTGTGCAATTCGGGGC  
 ATGACCGTCTTTTTGAATTCCTAACTTTCAAGTGCAAAGTGCCGAAGAACATCAGCTTGGT  
 GCGAAACGTGAACGCTGGATTACACAAGAAGGCGTAGCTGCCAAGTTCACCGAAGAAGAT  
 GAAATCGTATTCTTCGATCAGATATCTGAAAGCGAAATAACCAGGTGGAAAACACCAGAA  
 GGATACTTCACTGAGGTCAGAATTCGTGCACCAAACCACTTCAACATACTGGTTACTCCG  
 CCTACTGGTTCTGACTATCTCAAACAGTACCTTCCTCTGTCTCAGTGTTTAGAGACGGT  
 CAATGGAGCAACATTAAATTCGAGGACGTCTCTGTAGAAATC

>RXN02939-downstream

TAGGGCTTTTCGACGCTTGAGCCC

RXN02950-upstream

TCCGCCCTATTTTCAGCAATGTTTAAATACCGGTGGAATCGTTTTTATTAGGATGGGTGGAT  
 ACCTATCTTTAGTGAGCCGTACTAGCGAGAAAGCTGCCCC

>RXN02950

ATGACTGTTTTCAATGTTCTCCATGACGCACCCGCACCACAGCCGGATAAAAACCGCCCC  
 GGTGTCAAACGTCTCCTCCAAGGTGATGGCGCAAACCTCATCGCCTTCACTTTTCAGCCCT  
 GGACAGTCACTTCCCGACCACCGCGCCGCACATCCCATCACCCTGACCGCATTTTCTGGC  
 CAGCTCACCTTCAGCTATGGCGAGGAAACCTTTGAGCTCTCCCCCGGTGTGACAGTGCAC  
 TTGGAAGCAGGAGTTACCCACCGCGTGGACTGCCCCGCCAGAAGCACCAGGCGATGCAAGT  
 AATGCTGTAACTATGCTCACTGG

>RXN02950-downstream

TGAAAAACACTCAGTCAACCAGG

RXN02951-upstream

GATAATGAGTCAGAAAATGAAGGTAGCACTACTTGCTGGATTAAATTTTCAAGGTTTTCTT  
 TCAGAAATTAATCCATAGCCGATATTTAAGGTGAGAACAC

>RXN02951

ATGAGCTCCACGCTCGCACGAAAAGCTTCAGGCGACGGTTCCGAAAAGAAGAAGCCTGGC  
 TTGTTTAGACGTGCGCTTCGTTTTCCTCACCCACCCACCTCACAAACAGGTAGACAACAGC  
 CTTGCGGATATCCGTGAAGGATTAGGCCTCGGGGTGGACGATTTCCACGAAGGATCCAAA  
 CCCAGCAACGATCATTTCTTGTGTCATGAAAAGCCTGAAATTTCCGTCATGCCGACCGAA  
 TCAATGGCACGGCTGATCTTTTATGCGCCTGATATGGATGGGCAAACAGACCCCGGTGAA  
 GTAGTGTGGATTTGGGCACCAGCCGATGGCCCCCAGCAACCACCCCGTAAACGTGCCATC

GTTGTTGTTGGAAGAAACCGAAACGCCATTTTAGGTCTGCTCATTTCC TGCAACCCCGAG  
CACCGCACTGATGAAGACTGGATCGACATTGGATCTGGCAGCTGGGACCCCTCGAGGTCGC  
CAAAGTTGGGTACGACTCGACCGCGTTCTGGAGGTACCCGAATTGGGTATCCGGCGCCAA  
GGAACAGTCGTCCCCCGGGGCGCTTTGAGCGTATCGCCAACCGCCTCCGCAACGATTTT  
AACTGGGTC

>RXN02951-downstream  
TAACATTTATTTGGTAATTGGGC

RXN02957-upstream  
GCATGCTATTGCGCTCCGGGTGGGAGATTCTGTCTGTCATGCCGCGGTTGTGGTGGCGCA  
ATGACTGCGCCCCGGGCACGGAATGGCTCCGGGTACCAA

>RXN02957  
ATGCAAACTGCCCCAAGGAGGAAGGGTCTACACCTCACTGATGGACGAGAAGTCCCTTTCC  
CCGTTGATCGGTCTGCCGGGTCTGGGAGAACATCGGCCTGGGCCGACACTGGCACGGTCTG  
TCGACGATGTTGCGGGTGTCTAACGGCATCGTCTACGTCGTTCTGCTGTTCCGCCACGGG  
CTGTGGCAAGGCATTATCCCCACCTCCTGGGACGTCTTCCCCGAGGCGTGGGAGACATTG  
AAGGTTTACCTGGGCTTTTCGTGCCCCAGGCATCGAGCACTTACCCCCCTA

>RXN02957-downstream  
TGACGCCTTGCAAATGCTGGGCT

RXN02967-upstream  
GGGAATCTAGTCGGCCTTCACCGGTGATCAACAAGTCAGTTTCTGGCAGCGCATCCTCGA  
TTCCGTTGGAGCGGGCAATCAGTGGCGCGCCGGGGAGGAT

>RXN02967  
ATGGATCTGTTGGTTCGTTGCCGTGCATGAGGGTGGACAGCCACGTCAGTCCGATTGCAAT  
GCCCCCGGCTGCGCCCATACCTGGCTTTGTGCCATCAACTTCCAGTTGGGCGCAGGCGTG  
GTGGAGGGCGGCGTCGAGAAGCGAAATGTCTTTTTCGGTGGCACCTTTTGGGGCCCGAA  
TACGGTGGCCGCGCCCTGCGGGCCGGTGGCGGGGGCGTCGACATCGGTGAGCAGGATCCA  
TTTCGACGGCGGCTGCGGGGATGTTGAGTTTCGGCGGTATCGATGTAATCGAGGTTGATGAG  
GTCCGGCGCCACCGGTTTCG

>RXN02967-downstream  
TAGTGCGTAGCCCTCTTTGTTGC

RXN02971-upstream  
TTCTGGTCCGGATTTTCGGGGAATACAGCGAGGGAGAAACGTGGCACGCCATTCAAGTGG  
GAATTCAAACTTAAGGTTATCTAAATCGCTAACCATTGCG

>RXN02971  
TTGATTGCCATCGTCGCTCTCATCGTGGCACTTGTGGTGTGGCTTTTTTAACCGTTCAGAT  
GATTCTGGCTCCACCACGACCACCTCACAAGAGTGCATCTCCGAAACTTGAGTCTGCCC  
GTTGGTGGCGATTCCACCGCAGCCGAAGAATTAGTGAACAAATTTAATGACTCATCACCT  
GTCAGCCGTGATTTCTGTGTTGAGGCGGAAGCTGTGGACGGTAACGTCCCCGCTGCCACG  
TACCTGTTTCGCTGGTTCTCGTTCTGATGCTGCCACCGCACTTGCTGAAACCGGTGCCGTA  
GCAAGCAGCTCT

>RXN02971-downstream  
TAAAGCTCTTGGCCCTAGGTTGG

RXN02978-upstream  
GCCTCTTAAATCAGACAATTTCAAGTGTGGAAATAGCTACAAGGGTCTACTGTAAACGAA  
GAACGCTCGATAGGGCTGTGTACCTCAACGGAGGTAAAC



>RXN02978

GTGATTGATCGACCTGTATGGTTGTTTGAACCTTTATAACACCGCGAAAGAAGTAGTATAT  
TCGCTACTCATTGATCAAGTAACCTGGGAAAATACAATACTCAAGAAGGATGATGGTTGG  
CGAGATCAATTCATGATTGAGTCTTTCTTTGCTTATGATTCAGAAGCTGACGCGACCTCG  
TGGAGCGGTAAGAACATGAATAGCTACTGGTTCGTTAGCGATCTAATCAGCAATATATCC  
TTCGCTGAGCGATCCTTGGAAAGCTTTTCTTGGGCTCTTCGAGATCTTGAGGATCTTTCT  
TCTAGTGAACTGAATTTGAAGGGCTTGAAGAGCTGAATCTAAAGTTTAGTGAGCTCCAA  
GAATGGTATACGAACCTGGAACCTTCTTTTCAGCCGTCGGCTGCTGATGTTGATGAGGTG  
GAGCAGTATCTGCAAGCTGAAGTGACAAGGCAACGGGGTGACTATCAATGGTCTCCTGAG  
TTTTGGATACCAAAGCCGGATTCTACTATATCGACCATGCACTAGCGGTGTGTCACAGAT  
GTTTTGGGAGCTATTGAACAAGGGGAGCTGCGTGAAGAAGTAGAGGTGCAGCAGGCTTTA  
GACGAGGTATCTGAAAATTGGAATCCTTTGGAAGATTCTGATTACTACTTACAGGATCAC  
CGTGGGCGCCCTGTACAAGATCTTTCCCGGGAATGGAGGAGTTGGTCAGATGTCTAATG  
CTTGACCAAGAGTGGTGGGGTGAGAGGCAAGGATTAGAAAGCTTGTGAATCAGTTGAG  
TGGGAGGATACTCAGGCGATCAGCTCTTTAATTGAACACGAGCAATATTGGGAGGATGGT  
CGTTTTTCGCCACCTCTACATAAGTTTTCGGAAGGACTAGACGAGCCAGAGCCCTTGCCG  
ATGACGAGAAAAATGATACCTTGCAGCAATCACCTGATGTTTTACGCGTAAACATTGCT  
GATTATTATCAGCAGCATAGGCGCATTGCTACTCAGAAGGTGGAATGTTATAAGGAAGTT  
TTGGCATTGTATCCAGAGATTCTTAAGAAATTTGATGATTCATCTTTCGTCAATCGACAT  
TGGATCTATAGGGCGTTTGATCGCGAAGGTCAGCTTTTGTATATCGGGGAGACAATAAAC  
CCTCTTGTACGGTTGAGGGAGCATGCCGGCTTAGGGTCTATTAACCACGCACATCATAGG  
CTAGTATCGCCGTGGTTTTCTACGATGGCTACATTTTCATCTTGAATCTTGCTTTACCCAG  
GCTGAGGCAAAAGAGAAGGAGGCTTTATATATTAAGCTGGAACAGCCAAGATATAATAAG  
ACGCATAATCTGCTAGATTGGCGGTTTCTGAAGAAGGGGTGCCGGTGAACGAGGTGCCG  
TCAAGAAATGATCCGAGGAATGTGCGTTGGAAGGGTCATAGGCACGTGCCACCAATGTTG  
CCGATTGTTGCACGTGTTGTCGATGAATCGACAACACGTGAGGGATATGCGTTTTACGAG  
GACAACCGG

>RXN02978-downstream

TAGCGTTGCGATCTCTCGTGGA

RXN02995-upstream

AAGGCAAGGTCGGAGACGAGCCTTGTTAGTTTCAGAGTCCTAAATAGGCGTTTATGTCAGC  
TCGCGCAACAGGGATACAATGAGCAACCGTGACGCAGCAA

>RXN02995

TTGAACCACGCAAAGGTAAATCAACATCCCGGTCAAGCCACCCTCCCAGAAACCGCAGAG  
GGGCAAGTTTCGCACCTACGAGGTAAAAACCTACGGCTGTGATGAATGTGCACGATTCT  
GAGCGCCTTTTCGGGCTGCTCGAGGAGGCTGGATACGTTGCTGCTCCGGAGGACACCACT  
CCGATCTTGTGCTATTTAATACGTGCGCCGTGCGTGAACACGCCGATATGCGCCTCTAT  
GGCATTGTCGCAACCTGCGAGCGTGAAAGAAAGAACCCAGGCATGCAAAATCGCTGTC  
GGTGGTTGTTTGGCTCAAAAAGACAAAGATACCGTGGTGAAAAAGCACCGTGGGTGGAC  
GTGGTGTGTTGGTACCCACAACATTGGTTCCCTTGCCAACCTTGCTTCAGCGCGCGGAGCAC  
AATGCCCCAAGCGGAAGTCGAAATTGTCGATTCCCTCGAGCAGTTCCCGTCAGTACTTCCT  
GCAAAGCGCGAGTCTGCTTACGCTGGTTGGGTGTCCTGATCAGTCGGATGTAACAACACC  
TGTAATTTCTGTCATCGTTCCGTCGCTGCGCGGTAAAGAGCAGGACCGTCGACCAGGAGAC  
ATCCTCGCAGAGGTACAAGCACTGGTGGATCAGGGAGTTACCGAGGTAACCTCTACTTGGC  
CAAAACGTAATGCTTACGGCGTGAACCTTGTGTTGATCCTGAGCTAGAGCGCGATCGCAGT  
GCATTTTCCAAGCTGCTTCGTGCTGTTGGTGAGATCGAAGGCCTCGAGCGGGTTCGCTTC  
ACCAGCCCTCACCCCTGCAGAAATTCACCTCTGATGTGATGACGCCATGGCAGAGACCCCA  
AACATCTGCCCCGAGCTGCACATGCCACTGCAGTCCGGATCTGACAAGGTGCTCAAAGAG  
ATGCGCCGTTCTTACCGATCCAAGAAGTTCTCTCCATCTTGGATGAGGTCCGTGCGAAG  
ATCCCTCACGCCTCTATCACCAACGATATTATTGTGCGATTCCCTGGCGAAACAGAGGAG  
GATTTCCAAGCAACCTCGACGTTGTCAAGAAGGCACGCTTTACTTCTGCTTACACCTTC  
CAATACAGCCACGCCCTGGCACCCCTGCGAGCGGAATATGAAAACAGCTTCCAAAAGAA  
GTTGTGCAGGAACGCTACGAGCGCCTCATGGTTCGTTTCAGGAACAAGTCTGCGAAGAAGAA  
AACCAAAAGCTCATCGGCACCAACCGTCGAATTGCTGGTCCAGGCTGGCGGAGGCGCAAG  
AACGATGCCACCAAGCGCATGAGTGGTTCGCGCACGCGATGGACGCCTCGTGCACTTTGCG  
CCAGAGGGCGCATTGATGGTGAGATCCGCCCCGCGGATTTTGTCACTGTCACGGTGACT  
GAGGCCAAGCCTTTCTTCTCATCGCAGACTCCGGTGTGACAGCCACCGCGCACCAAA

GCTGGTGACAACTCTGCAGTTGGTCAAGTTCCAACCACAGCACCGATCGGTGTGGGCTTG  
GGACTGCCACAAATCGGCGCACCAAGGTGGCTCCTGCCACAGAATCTGCCTGCTGCTCC  
ATTAAC

>RXN02995-downstream  
TAAAAAATTGCAGGCTAGAATAGA

RXN02997  
CCCCTACCGGGCCAGCCCTTTGAGGGCGAGGCTTTAACGCTTATAAACGCCCTCCTCCAC  
CACGCCGAAAACGTGCGAGCCTCCAACCCCTGGAAGCGCACACCTTCCACACCGCTCAC  
ATGCACCTTCCAGGGAGTAATGCGGATTGTGACTACTGCCTGGTGTGCAACGCCGCGGA  
TACGTTAAAGCCCACGAAGAAATCCAACAAACCATCCCCGCTTCCTTCAGGTGACTGGTCC  
GCTGGAGAAATTCACCGTGGTGGACGTTGAAGGCACCGCCTTCCCAAGCGCGTGATCCCC  
AGCATCGTGGAACCTCCAACACCGCGCAGCCCTCGATGTGCCCCACGGAAACTTAAGTGTT  
GCGCCTGCACAGTGGGATGAACACCGCTTGGCGCAGCAATCTGAAAGAATCCTTAAAACA  
GGAACGAAACTGTTACCGTACTGTTTGCCGAAGGATCCACAGTCGCTGCCATGTCTCC  
ATCGCGATTCCCCCAGGCTCCAACCTGACATCGCCGAACAGGGACTGACCATCGTGCAC  
CCAGATTTTCAAGAGCCGTTGGTCTTGAACCGCTGTGAAATTAGCGGGACTGTCTACTT  
TCGAGGTGCCACCCAGAAATTCAACGCGTAGCCACCTCAAATGCAGTAGACAACCATGCG  
ATGCTGGCGATTAAACCGCTCCATAGGGGCAACAGAGATCGCCCGAACCCCTGTGGGAG  
AAGAAACTC

>RXN02997-downstream  
TAGGTGATGGAATTCGAGACCAA

>RXN03001-upstream  
CCCGGTTACGATGATCAATGACTTCACGAGCACCGATGAAATCGATGCTGCGCTTCGTGA  
ACGCTACGACATCTAACTACTTTAAAAGGACGAAAATATT

>RXN03001  
ATGGACTGGTTAACCATTCTCTTTTCTCTCGTTAATGAAATCCTTGCGGTTCCGGCTTTC  
CTCATCGGTATCATCACCGCCGTGGGATTGGGTGCCATGGGGCGTTCCGTGCGTCAGGTT  
ATCGGTGGAGCAATCAAAGCAACGTTGGGCTTTTGTCTATTGGTGCGGGTGCCACGTTG  
GTCATGCTTCCCTGGAGCCACTGGGTGCGATGATCATGGGTGCCACAGGCATGCGTGGT  
GTTGTCCCAACGAATGAAGCCATCGCCGGAATCGCACAGGCTGAATACGGCGCGCAGGTG  
GCGTGGCTGATGATTCTGGGCTTCGCCATCTCTTTGGTGTGGCTCGTTTACCAACCTG  
CGTTATGTCTTGCTCAACGGACACCACGTGCTGTTGATGTGCACCATGCTCACCATGGTC  
TTGGCCACCGGAAGAGTTGATGCGTGATCTTC

RXN03005-upstream  
TAGGTAAACCTTAAACAGTCGCCATTGAAGAATTTTAAAAACAAACAACCTTCAACGCGC  
TAACAAGCATCTTCCACTCTCGTTACCGGAGTTTCTCAC

>RXN03005  
ATGTCTCACAAAGTTTCCCGCCGTGCTTTCGCACTACTGACCGCTGCCGCAATTTCCACT  
TCCGCTTTCGCAACCACTGCTCCGTCTGCGATTGCAGAGCCAGTTCTAATGTGCACTGC  
AGACGATTCCAGCGTCGCAACTTCAGAAAACCTCCCTCGACTGGGGCTTCAAGGCTTCCTG  
GCGCACCTATGTACCGGACCTTGGACTGGTGGAAACCGTGACGCAACTGGCGGTGCAACT  
GTCAACGAAGATGGAACCTACAACCTCACCTCGGAACCTGGCTCCAATTACGACGTCGAC  
ACCGAGAAGGGCCAGCTGAACTACGAAGGAACCTGTTGCCTTCGCCAGTGACGCTCACGGC  
TTCAACATCACCTTGTCCAACCCGCGATCACCGTCGAGGGCGACACTGCAACTTTGAGC  
GCCGAGCTGTCTGACAATGCCGCTCCCGAAGAGACCTCCACTACTCGCGTTGATGTTGCT  
GAGTTGCAACTGACCGCTCCTGAGGTTTCAGAAACCGATGCGGACATTACCTACACCTGG  
ACCGATGCTTCCGGCATTCTTGGAGACCCTGCAGCCTGAAGAATTGAGCCGTTACGCA  
GGCCAGGAAGCGGATGCGCTGAGCTTCTCCATCACCGTGGACAAGGCTTCAGAGAACCCT  
TCCGATGATGTTGCTACCGGATCTTCTCCAGCTTCTCTCCACCATCTTGAACCTTCCTT  
CAGCAGCTGGCGAGCCCACTGCTCAAGCTCTTCGGTTCGCTTTCTTCC

>RXN03005-downstream  
TAAATAATCAGTAATGCCCCACC

RXN03009-upstream  
ATGTGAACCTGATGCTGGCACCTGAAGATAGCCACAGCCAGGCACCGCAACAGTGACCT  
ACCGTCATGGTTTCAGCGATCACCGTTTACCCTGCACTGC

>RXN03009  
GTGGCTAATATCGCCAGCTTGTACGGACTGTGGGAAGGCAGCACATCCACACCAATCGAA  
CAGCTCGTACCTGCGAAAGGTTCCAGCTTTCGTTTGGTGAGGTCTTTTACAGGCGAATT  
GACGGCCAAGCAGTTCAGGCTCGTCTCAAGGAGAAGATTCTCAACACCGCGGAAAACCCG  
CTTCCTCGCTTGGACATTCCAGGTAAGGAGCGCACTGCGCAGTACCCAGAAAATCCGGAT  
ACCTTCGCCCAAAAAGCAGCTCAAGAAATTCTTGATGAGTTCAGAACTCCACTGATCGGT  
GAAGAAGCTGCAGCTCATGTTGAGAAAACGAAGACGATTTTCTGGAAG

RXN03010-upstream  
TGGGCGCCTTCAATCGGCACCCACTGAATGGATTCTTCCGGGCCTAGTTTTAGGGCTGAT  
CAGCCTGGGACTCAATGCGTGGATTACCTTCGGTGCGCCA

>RXN03010  
GTGCCACCGATAATCTTTTTCTCATCGTTGCTGGAATTGCGTGCGTGGTGTGGCAGGAATT  
TTGAGCGTGCTGTCCATCGGCAAGTACATGTCAGCAGTAAATGAGCGAAAGTCGACAGGC  
TTTTATACAGAAGTGCCGTGGAAGAAAGCGCTCTTTACTGCGACAGCCGTCCTATTGGTG  
TTTGCTGTTGTGTGGTTCGGCCTTGGATATTGCCCTGTGGGTAGGAAAGCAGTCATGG

>RXN03010-downstream  
TGAACACGTTGAACTCTAAAACC

RXN03011-upstream  
CCGACGTACCAGTTTTTGTGCTTCCACCCCTGGACTAAAACCGAGACGAGAACCAAGAAG  
ATGAAACCAAGGGGTAAAACTGGTAGTCTCTTCCACGTC

>RXN03011  
ATGGCATACGAAACTGATTCCCTCAACCGACGCACCCTCGGGCCCCGCGATTGCAAGCGCA  
GTCGTGGGAATCGCCGTGCGCGCAGTCGCAGTAGTTGGGGTTTCAATGATCTCAGGGCAG  
GACACTGTTCCCACTGGTAACGCCGTAACCTGCAGACGATGCCCTGCTCGGTGGCCCTGAG  
TATGGTTACGCGAAGCAGAC

>RXN03011-downstream  
TAAGAAGCCACTTCCCCGTTTTTC

RXN03012  
ACCACATCAACATCATCATCACCAATGGCGCTGCACCACACCCAACTAATCTCAATCGC  
GCAGAAATTCATGATCACCTACCCCTCACTGCCTCTGATTTCGGAGCTAACCCGCCCTCC  
CAGGAATCAGTTCTCTATGACCATGAATCCGAAACTGTCTTGCGCACCATGGTCATCCCT  
GCAGACCTGCACGTCGCTATGAAGCATCTAGCTAAAAAACACAACCTCACGGTCACAGAG  
ATCTCGCGCATCCTTCTGCAGCGCTACATCGACCGCAATATTAACCATGTAGAGCAAAAC  
CAGGCTGAATCCGACATGGTGGAAGTCTTTGCCAGCCAACCAACCAATGCAACCGCAATG  
ATCCCTGTACCTGGAACCAGCTTCAGGCAAATATTTATCAAGCACAGCACTGGTTTCTGG  
AAAAACATTGATCATGATCTTGTGATCTCGACGCCTCTAAGACCCCGCGTGACGCGAC  
CGCAGTGTCTTACCACAACCTCAACTCCACAGAGCGTTGTTATCAGATGCTGATATGGCT  
CGCCTTGCAGCACAACCTGACCGACAAACAC

>RXN03012-downstream  
TAAAACCTCCACAACAAGGACAT

RXN03017-upstream

AACTCAATATTAAAGTCGCGTAATTAGTGTTATATTAATTACGCGACTTTAATAGTTTTTC  
GAATACGTAGATTCTCGAAATACAGCAGAAAGCAGGGGTT

>RXN03017

ATGCTCGATTTCATTGAAAAATCGCTTCACCAAAGCGAAAGGTTCTCATGGAGTGGGGGAG  
GGGGCTGTTTCTGGCGATGCAGCAGTAAAGCCACTGCGCAAAGAAGAACGACTCGCCTCA  
GTCATTACAGGAAACCGAACCAGGTGCTGCAGTCGAGGTCATGCGTCGCAATGACGCATTC  
GCTTTGCCAGGTGAGACCGGTTGGGTAGTCATGCTGTTGCCAACTCACGATTCACAATTC  
GGTGGGCTCAACGCTAAGGAAAAGAACCAGCGAGGATAAAGGCACGATCATCAACCTGGTG  
GTCAACGATGATATTTCATTCGGTTGTCACTCCAGAACTTCTTGACAGCGATGTGCTTGGT  
GTCATTCTGTATGCAGATTCTTTTCGATCGCATGGATGAGTTTGATTTACTGCGTAACAAA  
GCACGCTGGCACTACGGAGTGGCTGCAATTGAACCTGACACGGGTGAGCTGGTGGTGT  
AAGGTGCCCCGCGAAAAATAGCGCTTCGGCACGCGGTGACATTTTTCGAGGTGCGCGAT  
GTGCTTAGCGGTGCTGCTGACCTCGAAGACGTGGTTGATTTTGAGGTCATTGCCACCTTC  
CTAGAGGTGCTGAATGAGACCTCTGAGGTGGATATTGATGACGAAGATGGCGACGTGCCT  
TATGGTCTTGAGGGTGTCAATGCAGCGGGAGTTATCACGGATGACCTCATTCGCGAGAAG  
CTTGATGTGGATTCTTATCCGAGCAGTGCAGAGATCATTGACAATATTGTGCATGTGTTT  
ACCAAGTTGCAGGGCAAGCATCATGTGGCACCACAGCCGGTGCTTCACAGCGCAGACGTA  
GTGGATGTTGATGCACAGGAGTCCCATGACACAGTGGTTATTGAGAGCCCTGATGATGTC  
GCACTAGCAGAACAGGTGGATGTACCGGATTTTCAGTGATGGATTTGGTATTGACGATGCC  
GAGGTACTGAGCCAGAGGATGAGGAGGTTGTGCAAGCAACAGCTGATGCAGATCCTTTT  
GGTGTATGATGAGCAGAACGATCCTTTTCGGCAGTGATGATGAACCAGATTTTGGTGCATCC  
GATGTTGTTGCTGCACCGGCACCTGTAGCCGGCATGTCCGATGAGCAGATCCAGGCGCTG  
ATTCGTGGTGTGTCTGAGTCCGTGCAAGCAAAGACTGGTTTCAGAACTTAATGCTTTGCGA  
GAAGAACTTGACACAAGCACTGGCTTACAATCCGGTTCAGGATTCACAGGCAGCATTGGCA  
CAGGTGCACGCAGCTGATGCCCGCAGCTTTGATGCCGATCAAGTGGGTGATGCTGTCACC  
AAACGTTATGTTAATGACGACTTGGGGCTGTATGTGCGATGAGGCAAACCTCAATAATGCT  
TTGACCAGGGCACCCTTCCAGGTGGCGATGCCGCAATTCAGGAGACTACACCGTGGTTA  
GGTATCAGCTTCGTACATTGGTGGCTGTGTTTAAATGGTCAGCTGCTTGATCAGCATCAG  
CGTGACTACCGAAGAAGTGCGCGCATGTACATTGCGCT

>RXN03017-downstream

TAATGATCGCTCTAATCTTGAGA

>RXN03018-upstream

GTGGCGATGCCGCAATTCAGGAGACTACACCGTGGTTAGGTGATCAGCTTCGTACATTG  
GTGGCTGTGTTTAAATGGTCAGCTGCTTGATCAGCATCAGC

>RXN03018

GTGACTACCGAAGAAGTGCGCGCATGTACATTGCGCTTAATGATCGCTCTAATCTTGAG  
ATCGCTCGTGATCTTGACTGGATAATAAGGATTCCGAATTCACGAGGTTTACCGTGCC  
ATTGAGCGTGACCGCATGTTATGGCTGGTGATCAACAGCGTGTGGAGTCAGAGCGTCGT  
CAGCAATTGCAGCAGGAGTATGAGGCGAACCCTGAAGAATATGTATGGCAAAGATCGCG  
GAGCAGCGCGTGGAGTATGATCGCCGTCATATGCCCTCGCCATACCGCATCACTAGAACG  
GTAGGTGAGAGCTGACGAGCCTGCGGGATCGCACCATTTGAGGATTACACCGCAGCATG  
AACACGCTGCGTCGTGCACGTGCTGGTGAACGGGCTAACGCTGCAGAATCTCGCATTATT  
GACGAATTGCGCCCGATTGTGGAGCGCCAGGCAGAACTGCAACGAGCAGCTTTCGATGGT  
TTCATTGTTGATCTTGACAAGTTTATTGCTGATCACCGCGAAGATGACCTGCGTTTGGCA  
TCGGTGAATGAGCAGAAGCTTGCTGCAGATAATCGTGTGGCACAGTTGACCAAGGAAGCC  
GAAGAGCGCATCGAGGGTATCCCGCTCGAGACCGATAAGATGATCGCCTCCCGCGCAAG  
GCACTTGAGCGTCAGGAAGCGGAATTCGCAGCAGAGCTTAAGCGTCGCGACACTATTGTC  
GCTGCATCGGAGGAACGTGCTGAGCGGGAAATTACCACAGCACGTCTTGATGCTGAGGCG  
GCGCTCAAGCGCATGGAAGAGCAAAATTCGTGTAAATAATGAGGCGCATGAGGCGGAGATT  
GTTATTGAGCGCGATCGAGCCACCAAGCAGAGGCGAACTCCATGACGTTTGTGAGTCA  
GTCAAGCAGCAGGATCGCAGCAACAACATCATTTTGAATTGCCGTCCTCATTGTGGGGCTG  
ATTGCCGGCATGGTTCGCTGGCGCAGCCTTCTTC

>RXN03018-downstream

TAAAAGATCGTTGCGCGGGCTGT

RXN03024-upstream

CTCTACCCACTTAAAAATGGACGCATATTCGCAAGATAAGGCATGCTTGGATGAATAGATT  
TTAACTCAACGTTTACTAAACAGAATCGGAATTAGGAGCC

>RXN03024

ATGCTTGAACGCACACAGGTATTTCGTGGATACGTCCTACCTGCTCGCAAGCTTTTACAAC  
TCTTGGGAGACAGGGGCACGTGCCCAATTAGAAATCGACCTCCCCGAAGTAGTCGGGGTA  
TTAGGAAGGATGATTGAACAACAAC'TTAAACAGCCAGTACAACGCCAAATGTGGTACGAC  
GGAATCCCCGATTCCGGCCCCCACCCTATCAACGAGCACTACGCACCTGCGATGGTGTG  
CAACTTCGTGCTGGCCAATTAATTGAATGGGGCGAACGCCGCACACAAAAGGCAGTAGAT  
ACCCGCCTTGTTCGAGACCTCGTTC'TCGCAGGTGTTTCGCGGACAATGCTCCGATATCGTG  
CTCGTCAGTGGCGACGCCGACATGATCCCCGGTGTTCAGAAGCTGCCAATGCAGGCCTT  
CGCGTTCACCTCTACGGCTTCGGCTGGGATTCCATGTCTCCCAACTGCGCCACTGCTGT  
GACACCACCACCATTTTGGATCCTCGAGAAGATTTTGTGTAATGCATGCAGCTGCAGGTT  
CTCGAAGGTCCACTACCCCTGTTCGTTCGGGTAAAGCCCATCAACGATGCAGAACCCATC  
GAGGATTTGGATTTCACTCCAGTTCAGGCGTCGCCTCACCATT'TGAAGAGGTCAGCGCG  
AAAGATGAGAAAT'TCTCTCCACGCCCAAGTGAACCTGCCGAAGCTTTGTTCGGAACAGGTC  
TGTGAAGCGCAGTATGAGATCTCCAAACACGAAGGTCAAACCGCTGATTTCAGGAGAAATC  
ACCGAGTCTTTTCGAGGCCGCTGAAATCAAGGTAAC'TGAGTTT'TTGGAGAACCAGCTGCT  
CCAGTAGCGGAATCAGGCGTAGAAGCTCCCACTCCGGAAGCTCCACGGTTCCTGAAGCA  
GCTAAGCCCACTCCGGCGAAACCTAAGACTCCAAAGGCAGAGCCCCAAAAGCAAGAATCC  
CCCAAGCCGGGAAC'TCCAAAACCAAAGCTCCAAGCCCTGCGGATATTCACCGAAAGCC  
CCAGCTGACACTGAGGAACATTCGGAAGTCGAAGCTGAAATCGAGGACTCACGTCCAAAG  
ATCCCCAGCCCTTCGATGATGGCTCCCCGCCGCAAGCTTCGTTCCCGCTACGTTCCGCTT  
CCCAACGAAGTGTGGGCAACAGCAGGATTCCAAACCTCCTTACGATGTCGGGCAACAGTAC  
GCATCGTGGTGGTTTGAACACGCAGCTACCAGCACTCAAAGAGATCAGGCTCATCTATTG  
TCTGGTGGCGGACTTCCACCAGAGATCGATCGCCCGCTTCTGCAGTTTGTGTAAGT  
CTCCACGAATACACCCCTGACTGAAGCGCAGCGCTAGCTTTACGCGATGGCTTTCACTCC  
GGAATCCGTGGTGTATTGCTCAACCAGCGAGATAGC

>RXN03024-downstream

TAGAATCACAAAAAACTGGGGCT

>RXN03025-upstream

AGCGAATCGGATTTCAGTGATTTGCTTGCGGGCGCAGAAATGATTTTTCAATTAGACACAC  
TTAGACACACGTAAC'TAAACCTCAGGGAAGTGACTGATA

>RXN03025

ATGGCTAATCCGCTCAGCAAGGGCTGGAAGTATCTCATGGCATCGTTCGACAACAAGATC  
GATGAGAATGCAGATCCAAAGATCCAAATTCAGCAAGCTACAGAAGCTGCCCAGAAGCAG  
CACCAGCAGATTATGCAGCACGCTTCTCAGATTATCGGTCAGCAGAAGCAGCTTGAGATG  
AAATTGAACCGCTTGGTTACTGACCGCGATAAGTTGCAGGAACAGGCTCGTCAGGCAATT  
CAGTTGGCAGATAAGTCCGCAAACGAAGGCGACAGTGTTAAGGCTCAGGAGTTCAACAAC  
ACTGCTGAGGTTTTTGTCTCCAGTTGGTAGCTGTGGAACAGCAGTTGGAGCAGACTACT  
GCGCTTCATCAGCAGGCTGAGGTTGCGGCGAAGGATGCTGTTGCGAAGTCTAAAGAGTCT  
GAGATGCGCCTGAAAGAGCAGATGTCTCAGATTGATGCTCTACGTGCGCAGGCTGATCAG  
GCGAAGATGCAGGAAAGTGTCAAGTCTATGGATTCTTTGAATCAGTTTGGCACTCAG  
GATTCCTTCTGTTCC'TACCCTTGATGCGGTGCGTGAGAAGATCGAGCGTCGATACGCAGAT  
GCTTTGGGCGCGCAGGAAC'TTACCAGAACACTGT'TAGTGATCGCATGGCTGAGATTGCG  
CAGTCCGGCACCGATATGCGGGCGTCAGCTCGTTTGGCTGAAC'TTCGCGCGGAGGCGCTG  
GGCACGTCCGCAACGCCTAAGGGCCAGCTAGAGGCAGGTGTCGAGGATGCGGAAGAAC'TT  
ATCGACGAAACCTCCACCCCTTCAGCTACCCCAAGAAACCGCAAGCCCAAGCTGATGCT  
CCAGAAGCATCCGCAGACGAGTCCGAGAAGAAA

>RXN03025-downstream

TAACCTAAACACAAAAAACTGGG

RXN03027-upstream

AATAGGAGAATTTAAA

>RXN03027

ATGGAAAACGTTTACGAGTTCCTTGGAAACCTTGATGTCCTTTCCGGCTCCGGCCTCATC  
GGCTACGTCTTCGACTTCCTCGGCGCTTCCAGCAAGTGGGCTGGCGCAGTTGCTGACCTC  
ATCGGTCTGCTTGGC

>RXN03027-downstream

TAATTAACTTCGCCCACGGGCAA

RXN03029-upstream

GGTGTGGCTTCCTATTTCGCTGCATCCTGAATATGCCATCAAAATCTTCACTCTGAGGCCG  
AAAAATCCGGTTATGACATTAAGTACCTAGGACA

>RXN03029

ATGTTTGGAGTGGGCTATTATACAACCGCCACCGATTGTCCACCCTGCAGCGCCCCAAC  
TTGCGCGGCATCCCCTTAACCTTCGTGAGCGTCGACCGAGCCGGCAACATGTCCAAACGC  
CAATCCGCCACGGGCTTCCACTTCACCCATTACGGCGGCACCTGCCCCCTGTGGAACGTG  
TTTGAAAACCTTCACCAACCCCGGCCAAGTGCTCCGCCAATTCGCGCAAATGCCCGACGGA  
CGCAACTACCTGTGGATCTCACGCACCGTGCGACACCACGAAGCCCGGTTTCGGCGAAGTA  
GACAAAATGTTCCGCCATCGGCTTGGGCTGCGAAGCGCGCCACGCCGACCGCACTGTGTAC  
TCCGCGGTTTCAACCTCCAGGACCTCTCCACCGCCACCCCATCGGGTCCGGCTGCCGA  
GTGTGCACCCGCGAGAAGTGCGCGCAGCGCGCATTCCCATCCGTCCACGGCCGCATCAAC  
ATCGACGCGCACGAATCCACTATCGCGCCGTAC

>RXN03029-downstream

TAAGAAAAGGAGCTTGCTTTACG

RXN03031

AACAACGGCCTTAACGCCATGGCCGCGATGACCAACCTCCCACACCTGCGCGCCATCCAA  
GAACGCTACTACTTCCTGAGCATCCGCTACCTCGCCTCCATCATGATCGCCGTGGCCAAA  
GCAGACCCACCCCTGTGGGAAGAACTCGACCTGCGCATCACCGACGCCTTAACACCAAGTC  
ACCGCAGGGGAAGTGATGATCCAATCCTCCACCTGTCCAAACGCATCGCCGCCTGGATC  
AAAGAACTCGACCCCGAACCCACACCAGAGCCCATACCGAAAGAGGACTATGTTACGTC  
CACACCACTGATGAGGCGACCTATGTCCGCATCAAAATCAGCGGCCCAACCGCCTGATC  
CTCAATGACATCATCACCAACTCAAAGACACAGACACCGAGGACAGCCTGCCTGAAGCG  
CTCATGGCGTTTCCTGATGGAGAAAATCCAGTTAAAGATCACCAAGTACCTTTTCACCCCA  
CATAAGCACCCCTGAGCAGGTGTGGTCACCGGACTACGGTGACATTGGTCCCCGAAGCCTAT  
GCCAATGCCACCCCTCGTGTGCGCCAAGGACTTAGATGAGGTGCTGGAGCCACGGAGAAG  
AGCTACACCCCGAGTGAGAAGATGAAAGCCCTGATCAGAGCTCGGGATGGGCATTGCCGC  
TTCCCAGGGTGTTCGTCCCGGCGAGTAAATGCCAGGTGATCACATTATCCCGTGGGCG  
GAGGGCGGCCCCGACAGCGGCGTGGAACCTGCAGTTGTTGTGCCAGCGGCATCACAAATATG  
AAAACCGAT

RXN03032-upstream

CCTGGTCATAGGATACTTAGCTCAACCACACGGTCAGGGCCAGCAATTCCCTCACGTTTTA  
CCAATCCGTAAGCACACCATCATGGCCTGGTGCGCCGCT

>RXN03032

ATGACCGACGGGGACTTAGACGCTGATATCTCACCCCGCCAGATCGGGTTGATGACCACC  
CGAACCGTGGTGCAAAATCGTTTCGACTACGCCACATGATTGCCCAACAAC TAGAAAGAGCC  
ACGATCATGGAACACGAGTACCTCAAAGAAATCGCAGCGCTGAAGAAAGAACTCGCGCAC  
TACAAGCAAAAAGACCATCAGAATCAAATGGTGATCGATATCTTGGGAAAAGCTATTGGG  
ACCAGGCCCAATCCTGGCGAGGGCTTAGACGAGGAGGACGCCACC

>RXN03032-downstream

TAAACGTGGATGAGCAACGCGCC

RXN03034

TTCCCACCAGATCGAATCTCCGCCAACGGGCGACGCTATTACGAGCCACAAACACGACTC  
GAGTTCATGCGGATCTACACCACCCTGCCGCACGGCTACCGCCAGCCCTTCCTTAAAGCC  
AACAAACATCGGCCACTGCACCGTTTGAACCTGGCTAGCAGCAATAAGCACCTTCAGCCGA  
CTTCCCCATGCTTTTGATGATGCCCACCGCTTCGGGATCGAACGCACCACCCAGTCGAC  
GATGTCACCACACTAACGGCTGATGACAAACGTGACCTGGTCATAGGATACTTAGCTCAA  
CCACACGGTCAGGGCCAGCAATTCCCTCACGTTTACCAACTCCGTAAGCACACCATCATG  
GCCTGGTGCGCCGCTATGACCGACGGGGACTTAGACGCTGATATCTACCCCGCCAGATC  
GGGTTGATGACCACCCGAACCGTGGTCGAAATCGTTTCGACTACGCCACATGATTGCCCAA  
CAACTAGAAAGAGCCACGATCATGGAAAACGAGTACCTCAAAGAAATCGCAGCGCTGAAG  
AAAGAACTCGCGCACTACAAGCAAAAAGACCATCAGAATCAAATGGTGATCGATATCTTG  
GAAAAAGCTATTGGGACCAGGCCCAATCCTGGCGAGGGCTTAGACGAGGAGGACGCCACC

>RXN03034-downstream  
TAAACGTGGATGAGCAACGCGCC

RXN03037-upstream

CGCTAAAAGACAAATGACAGCGAAGCTGCATTCGGATACACACCTGAAGAACACTCTTCA  
CCACTAGCATTCACCAACGCCTCGGAAAGGGCTATCTCC

>RXN03037  
ATGCTGTGTGACGATCTTTACGCTGTTGCTCTCGATACTCACACCGGTAAGCCTATCCCC  
TGCGTACTCTGTGAAAATGCTCCACAGATTGTTATCTACGATGGTTGCTGCTCGCTTGCA  
TATACCCAAGCACTTGGCGATCTCGCCGAAGCGGAATACTACGGCGCCGATCTTGCTGCA  
GCTGCC

>RXN03037-downstream  
TAAACAACTTCATAGAACGACA

RXN03041-upstream

ACCGAGGAAGTGAAGGAAAATGTAGGTGTCGGGGCTTAGAGAAACAAAAAGGCTGCTAC  
GCGGACAGCATTTGTCACGTGCTGCTGCGGAGATCGCCTTG

>RXN03041  
ATGGAAGGCCCTGAGGCGTTCACGGTTGCGGCCATTGCAGCTGCAGCCGGGGTCTCCCCC  
AGGACTTTTTCATAACTACTTCCCTTCTCGGGAAGACGCATTGGTGCAATTTGTGGTCATT  
CGCGTTCAGGAACCTACGGATCAGCTATACGAGTTTCTTACAAGCGTGCCCCACGAGAT  
GCCATTGAACAATTGGTGATAAACCAATTGCGGGATGGCGATGACGCTATGGATTCTTTT  
AGCGCAATGTTTTCGAATCGGTGAGATCCTTGAAAATCTTGACCCCATCAAGTGTTATC  
GATAAGGAGCGACTCATTGCTCCGTTGCTTGAGTTTCATGGTTGAACGTGACAAAAGACCTT  
GACAAGTTTCGATNGCGGCAACTCTGATCCATTTGCATGCAGCGGCAATTGCAACCTCGCT  
GCATACGTTTTTACCAAGCTTCCGAGCCCCGGGACATAGAAGATGGAGTCGCATTGATCCG  
TCGGGCATGCGCCTGGAT

>RXN03041-downstream  
TAAGAAANTAAAAATCTSTGACA

RXN03045-upstream

AGCTTTTCTATTTTGAAAAATAGCCTTGTTATTCGAAAATTTGATCGGGTATGGTGGTTGG  
TATTAGCACAGGGAACATAACGGGAAAGGGGGAAGACACC

>RXN03045

ATGAGCATCACACACACGTCCAAGCACTCACACAGCACTCAACGCCATCGACAACCAT  
TTGGCCAGCATGCTTGACCATGGTGTACCCACAGACCAATACAAGGCCATCGAGCCCGAC  
CTCATCGCCCTAGAACACACCATCAACCACCGCCACCATCGCCGCCAAACCACCGCC  
CTCGCCGAACGCACCAATGCTGCGCAGTCGATTGGCTCCACCCACCTCATCGACTACCTC  
ACCACCACCTTCGGCCTATCTAAAGCACGCGCCACCACCGCATCAATCTCGCCCACTCC

CTCTACCCCATACCGAAGCCAAACTCTGGATCTGGCAACGGCGGTAATGGTGGCAATCCC  
GACGGTGGTTCCTGATGGTGGCGACTCGGGTGATGACGACTCCGGCGATGATGACCCCGAC  
CCCGAACC GGACAAGCCTGAAGACGGCAAACCTGATAGTGATAAGCCCCGTAGGCCACGG  
ATCAGCGCGGAAAAACACGCCATCATCACCGACGAACTCGCCCGCCTCAACCCGAATACC  
ACACCCAGCGCCGAGGAAGTGCACAACCAAGCCCTGAGTCAGGCGATCTGGCGCACCCCA  
GAAGACCTCCGCACGTGGCTACGCCACCAGGTCACCACCGCGAACAAAAACAACCCCAAC  
CCCATCACCGCCATGAAAAGGCGCTACCTCTCAGTAGGTAAACCCGATGCCGACAACATG  
GTCCGCATCAGCGGCCTCGTGCCCGCAGCCACCGCAGCACTGATCACCGCGAACACCGCA  
CCGTAAACCAAACGCGGCAACCTCGTGGATCTACCAGCAGCAGAAGATATGCGCACCCGC  
GGGCAACGCCATGCGGACGCGTTGCATCACATCATGGAGATCTACAACCACGGTATTGTC  
ACCCAGCTCGTGGTGAACAGCCAGCATCATCATCTCCATGACCACCGATGATCTTGAC  
GAGATCAACCACGCCAACAGCAGTGGTGAAAGTCTG

>RXN03046

GCCTCAATTGCTAATTCCACCCTGAATATTCCAGTGGGATTGGGCGGCTCCAATTTGCTG  
CTCAAGGCGCAAACCGCGACCCCATCTGAGCCTGCGAATGCTCAGGACAACTGTACCGT  
TTCTGCATCGCCAATGGTAAGAGGGCATTCTTCGATGCGCAGCGATTCTTGCTCAACGCC  
GACGAGCTCGCGGAGCTTTCTGATTATGAGCGTCTGGCTTATGCCATCACCTTGCTTGAT  
CAGCCTGGAAAAGAAGCAGAAGGACGCGAACTTTTCTCTTCGGAGCTTCGCCGCCAGGG  
CTACCGCGCTGTCGATTCTTGGAATCCCAGACTGT

>RXN03046-downstream

TGACCAGCTGAATAACCCCGATG

RXN03047-upstream

CTCTACCCACTTAAATGGACGCATATTCGCAAGATAAGGCATGCTTGGATGAATAGATT  
TTAACTCAACGTTTACTAAACAGAATCGGAATTAGGAGCC

>RXN03047

ATGCTTGAACGCACACAGGTATTCTGTGGATACGTCTTACCTGCTCGCAAGCTTTTACAAC  
TCTTGGGAGACAGGGGCACGTGCCCAATTAGAAATCGACCTCCCGAAGTAGTCGGGGTA  
TTAGGAAGGATGATTGAACAACAACCTTAAACAGCCAGTACAACGCCAAATGTGGTACGAC  
GGAATCCCCGATTCCGGCCCCCACCCTATCAACGAGCACTACGCACCTGCGATGGTGTG  
CAACTTCGTGCTGGCCAATTAATTGAATGGGGCGAACGCCGCACACAAAAGGCAGTAGAT  
ACCCGCCTTGTTCAGACCTCGTTCTCGCAGGTGTTTCGGGACAATGCTCCGATATCGTG  
CTCGTCAGTGGCGACGCCGACATGATCCCCGGTGTTCAGAAAGCTGCCAATGCAGGCCTT  
CGCGTTACCTCTACGGCTTCGGCTGGGATTCCATGTCTTCCCAACTGCGCCACTGCTGT  
GACACCACCACCATTTTGGATCCTCGAGAAGATTTTGCTGAATGCATGCAGCTGCAGGT  
CTCGAAGGTCCACTACCCCTGTCTCGTTCGGGTAAAGCCCATCAACGATGCAGAACCCATC  
GAGGATTTGGATTTCACTCCAGTTCAGGCGTCGCCTCACCATTGAAGAGGTCAGCGCG  
AAAGATGAGAAATCTCTCCACGCCCAAGTGAACCTGCCGAAGCTTTGTTCGGAACAGGTC  
TGTGAAGCGCAGTATGAGATCTCCAAACACGAAGGTCAAACCGCTGATTCAGGAGAAATC  
ACCGAGTCTTTTCGAGGCCGCTGAAATCAAGGTAAGTGAAGTTTGGAGAACCAGCTGCT  
CCAGTAGCGGAATCAGGCGTAGAAGCTCCCACTCCGGAAGCTCCCACGGTTCCTGAAGCA  
GCTAAGCCCACTCCGGCGAAACCTAAGACTCCAAAGGCAGAGCCCCAAAAGCAAGAATCC  
CCCAAGCCGGGAATCCAAAACCAAAAGCTCCAAGCCCTGCGGATATTCCACCGAAAGCC  
CCAGCTGACACTGAGGAACATTTCGGAAGTCAAGCTGAAATCGAGGACTCACGTCCAAAG  
ATCCCCAGCCCTTCGATGATGGCTCCCCGCGCAAGCTTCGTTCCCGCTACGTTCCGCTT  
CCCAACGAAGTGTGGGCAACAGCAGGATTCCAAACTCCTTACGATGTCGGGCAACAGTAC  
GCATCGTGGTGGTTTGAACACGCAGCTACCAGCACTCAAAGAGATCAGGCTCATCTATTG  
TCTGGTGGCGGACTTCCACCAGAGATCGATCGCCCGCTTCTGCAGTTTGCTTGTGAAACT  
CTCCACGAATACACCTGACTGAAGCGCAGCGCTAGCTTTACCGCATGGCTTTCACCTCC  
GGAATCCGTGGTGTATTGCTCAACCAGCGAGATAGC

>RXN03047-downstream

TAGAATCACAAAAAACTGGGGCT

>RXN03048-upstream



AGCGAATCGGATTTCAGTGATTGCTTGCGGGCGCAGAAATGATTTTCAATTAGACACAC  
TTAGACACACGTAACATAAACCTCAGGGAAGTGACTGATA

>RXN03048

ATGGCTAATCCGCTCAGCAAGGGCTGGAAGTATCTCATGGCATCGTTTCGACAACAAGATC  
GATGAGAATGCAGATCCAAAGATCCAAATTCAGCAAGCTACAGAAGCTGCCCAGAAGCAG  
CACCAGCAGATTATGCAGCACGCTTCTCAGATTATCGGTCAGCAGAAGCAGCTTGAGATG  
AAATTGAACCGCTTGGTTACTGACCGCGATAAGTTGCAGGAACAGGCTCGTCAGGCAATT  
CAGTTGGCAGATAAGTCCGCAAACGAAGGCGACAGTGTTAAGGCTCAGGAGTTCAACAAC  
ACTGCTGAGGTTTTTGTCTCCAGTTGGTAGCTGTGGAACAGCAGTTGGAGCAGACTACT  
GCGCTTCATCAGCAGGCTGAGGTTGCGGCGAAGGATGCTGTTGCGAAGTCTAAAGAGTCT  
GAGATGCGCCTGAAAGAGCAGATGTCTCAGATTGATGCTCTACGTGCGCAGGCTGATCAG  
GCGAAGATGCAGGAAAGTGTCACTAAGTCTATGGATTCTTTGAATCAGTTTGGCACTCAG  
GATTTCTTGTCTTCCCTACCCCTTGATGCGGTGCGTGAGAAGATCGAGCGTCGATACGCAGAT  
GCTTTGGGCGCGCAGGAACCTTACCCAGAACACTGTTAGTGATCGCATGGCTGAGATTGCG  
CAGTCCGGCACCAGATATGCGGGCGTCAGTCTGTTTGGCTGAACTTCGCGCGGAGGCGCTG  
GGCACGTCCGCAACGCCCTAAGGGCCAGCTAGAGGCAGGTGTGAGGATGCGGAAGAAGCTT  
ATCGACGAAACCTCCACCCCTTCAGCTACCCAGAAACCGCAAGCCAGAGCTGATGCT  
CCAGAAGCATCCGCAGACGAGTCCGAGAAGAAA

>RXN03048-downstream

TAACCTAAACACAAAAAACTGGG

RXN03050-upstream

GTAAAGCCTATAGGAAAAAGTGTGTCATATCACCCCTGTATTTCGAACACGTGAGCGGGT  
AGAGTGGGTGGTAACAACACGGGGAAAGGGGAAGACACC

>RXN03050

ATGAGCATCACACACACGTCCAAGCACTCACCACAGCACTCAACGCCATCGACAACCAT  
TTGGCCAGCATGCTCGACCATGGTGTACCCCAAGCAATACAAGGCCATCGAGCCCGAC  
CTCATCGCCCTAGAACACACCATCAACCACCACGCCACCATCGCCGCCCAAACCACAGCC  
CTCGCCGAACGCACCAACGCCGCCACACCATTTGGCTCCACCCACCTCATCGACTACCTC  
ACCACCACCTTCGGACTATCCAAAGCAGCGCCCCACCACCGCATCAATCTCGCCCACTCC  
CTCTACCCCATACCGAAGCCAAACCCCTGGATCTGGCAACGGCGGTAATGGTGGCAATCCC  
GACGGCGGTCTGATGGTGGCGACTCGGGTGATGACGACTCCGGCGACGATGACCCCGAC  
CCCGAACCGGACAAGCCTGAAGACGGCAAACCTGATGGTGATAAGCCTCGTGGGCCACGG  
ATCAGCGCGGAAAAACAGCCATCATCACCAGCAACTCGCCCGCTCAACCCGAATACC  
ACACCCAGCGCCGAGGAGCTACGCACCCAGCCCTGAGTCAAGCGATCTGGCGCACCCCA  
GAAGACCTCCGCACGTGGCTACGCCACCACGTCAACCACCGCCAAATAAAAACAACCCCAAC  
CCCATCACCGCCATGAAAAGGCGCTACCTCGCTGTAGGTAAACCCGATGCCGACAACATG  
GTCCGCATCAGCGGCCCTCGTGCCCGCAGCCACCGCAGCACTGATCACCGCAACACCGCA  
CCGTAAACCAACGCGGCAACCTCGTGGATCTACCCGACGAGAAGATATGCGCACCCGC  
GGGCAACGCCATGCGGACGCGTTGCATCACATCATGGAGATCTACAACCACGGTATTGTC  
ACCCAGCTCGTGGTGAACAGCCAGCATCATCATCTCCATGACCACCGATGATCTTGAT  
GAGATC

>RXN03053-upstream

GAGGTAAAGGA

>RXN03053

TTCCACTTCACCTCGACTGAGTTTGCCGGTTCTTATTCTTTGGTCACCAATGGTCTTAAC  
GATGTTGCTGGCGAATACGTCGGTGTTCATGCGTGCGGATGTCAACAACCTCCGCTGTGCTT  
TTTGATGTGGATCGCTGGTTCGGGACATGTTCGTATGCGCAGATAGCTCGATTAATACATCA  
CCACTACTTAAGCGTCCCCGTGTCTGTGACATGTGGGGTTCGAAGATTTCTCAGGCAGCG  
CTACTGAATAACCGTCGCGTAGTGACCCCTGGTGTCTAATGGTGCCAAGCTCGATGAAATG  
GGACCAAAGCTAGAATCCATGACCGCTCATGTGGATATGACTAGCGGAGATCTCAACATG  
TTCGAGCTGTTTGGTAAGCAAGAAGATGAGCTGTGCGTGTATTCCACACACATGGACAAA  
ATCGTGTATTATGACCGAGCAGGCATTGGGCGATAAGACCTCTGAGCTGGCGCTATTGCGC  
GGAAAGCTCAAAGAAATTATTACAGCCTTTTATGTGGATATGAAAATGTGGGCTCTTAAT

GCCGGTGAAAACCGTGACAAGCTGCGTCTTGTTGGTGTGCCTCATGAGCAGATCCCGTTG  
CTCTCTGTCTTCGTGTCCATTTTGGATCAAGAATATGAGCGCCAGAAATATGAGGGAACC  
AAAGACCCTGAAATGTTTCGTGCCATTCTGTGTCTGCGACTGACCTATAAGGATTTGCTC  
GATACTCATGGCGATCTGTTTAATCAGCACACGGCAGATGGCATTGATTCTGTGAACTCT  
GCACGCCGCGTGATCTATGATTTTTCTGGAGTGTGCGACGTGGCGCAGGTGTCGCGATG  
GCACAGCTGGTTAACGTGATTGGTTTTTGCTGTGGAGACGCTTGGTCAAGGCGATGTGGTC  
ATCATTACCGGTGCTGATGGCATTGTGATGTTGATGTTTCAGGATTATTTGGCTAATCAG  
TTCGCATATATGGCTGAGCGTGGTGGGCGAGTGGCGTATCTCTACAGCTCGATGGACGCG  
ATGCTTGGCACTGTTGGCTTCAATCAATTCCAACGTGCTGCGTACACCATTTTGGGCCCCG  
ATGAACGTTGACTCGGTGGATACCTTATCAATCTCTGATTAATAGTCAGATCCCAGTGGAC  
TTGGCACGGTTGGTGACAACGCAGAAATCTGGTGCGAGCTATTTGCGCCGAGGATCTACC  
AATGTGGTGTGTTGAAACCAACCTTGCGTTGGGCGTTAATCCTTATATGGAGCAGCGTCGC  
AAGATTGAAGCACAGCGAGGTCAGCGACGATCCAAGCGAGACAAGCACTACGGTGGTGGC  
ACGACGATGGTGGGCACAGCGGATCTTGATGTTGTCGCAATTCAGGCGAAGGCCGAGCAC  
CGCGAAGAGCGCTTTGATGAGAAATCTGCGCGCAAGATGAAGGAGCTTGATGATGTAGAA  
GCGAAAGAACTAGCTTTGAAACTGGGCCGAAGAATCTTGATGATGCGCTTGCACAGGTG  
GAGAAGAAGCGCTTGCGAAGCGG

>RXN03053-downstream  
TAGTTGTTGGCTGTGGTGAATAA

RXN03055-upstream  
AAGGTCAGCCGTATTTTCGGTCAGTCAGCAACTAATTACGCTTATCTTCCGTGTACGATAG  
ACCGTAGTTAACATAAGGAATGGAATAGGAGAATTGCGGC

>RXN03055  
ATGTATTCCGACAAGCTGATTCTCTTGTTCCTTTCTGAGCAGGATTCAAGCTATGAATGC  
TGCGTAGGTTTATTAGATGGCTCAGATGGACGTGATTATATTTGAAAAGCTTCTGAAGGT  
AGGAAGCTGAAGAACCATTCTTGAATGGGAAGATATTAACAAGGCTGATGTTGCTCGT  
GAAGAAATATATAAAGGGCAATTGGTGCATCTGGTGTGTTGTGACGGCTCTTTCCACGCTT  
GGTGAAATTTCTTTTGTGTTTTCCAGGTCAATCTTATGAGTGCAACACTCGAAGAAGAC  
TTTGCTGCGCTTGTGCTCGAAGAGGAGCGCACATCATTTAGACCTGAAGTGTCTCACCTG  
TGGTCACTCCCCGTAGGGTGGGTAGCTCCGGGGCTTGAGGGTTTCGTGGAGCGTAATTCC  
GAGGCAGCT

>RXN03055-downstream  
TGAACCACCGCTTCTGAGCCGG

RXN03059-upstream  
GTGTCAATTTCTTGGCGGACGGTCGTATCGTGAACCAGTTGTTTGATCCCACCATCGAGG  
AAATCTTGGCCACGATGAACGGAATTGAGGATATTGCCTA

>RXN03059  
ATGAATTCGGTTCCACAATGCGCAGAATCAGTCTGCGCAATATTGGCGCGCACAAAGGTC  
AGGCTGTTTTTGACAGTTCTGGCAGTGGTGTCTCGGCACGTCTTTTGTTCGGCGCGATG  
ATGTTTACCAACGCGCTGTCTCCACTTTTGATGAGGCTATTGCCAGCAGCTTTGACGGC  
GTGGATGTGGTGGTTTACCAAACGGTGCATCAGAGGTGCAGGGTGTTCCTGTTGAGACG  
GTTGAATCTTTGCGTGAGGATTCCCGCATCAACCATCTCAACATCAACGGTTCCCAGACT  
GTCGTTCTGGCGGATGCTGATTCCAAGGCAATTCAAACGACTGGGGGATCGTCGTTAAGC  
ATTTATTACAGCGCGGACGACGCGGTTGCCAGGCACCTGAATTGGCTGAGGGAGAGGCA  
CCGACTGGCACCGAAGAGGTGCTTGCTCGAAGGCGGGCGCTGAGGCGAATGGCCTGGAG

>RXN03059-downstream  
TAGGGGACCAGATCTTGGTTCGTG

RXN03062-upstream  
GATGAGTATTCTCTCCGAGGCAACGAAGTTAATATGTCCATGAGGGCGAAGTTGTAGACA  
ATATTTGGCCCATATGGATAATTGACAGGAGTTTAACGCC

>RXN03062  
 ATGGAAACCCCAACCCAAGACATGGATGTCCGCTGGTTATACACCCAAAGCCAGCTCAAA  
 CTCCGCGAAATTCTCCCCACAAACAAACCTTCGATGTCATCCAAATCAGCGAACTCGTT  
 GACCCACCGACTTCATCAGGCCAACAGCGTGGTCTTATCCGTTGGCATCGCCTTCGCA  
 GAAACGCCCCGACGGGCTTCGCGATTGGGCACACCGACTCGCCGACGCAGGGGTCATCGCG  
 ATCGGGTTTCGGCTCCGGCCTCACCTTCCCACAGGTTCCGCAGGCGCTTATCGACGCCTCC  
 CTCCACCTTGGCCTCGGCCTCTTTGAAGTCCCCCGTGAAATTCATTTATCTCGATCACC  
 TCCAGCGTGCGTGATGAGCAAACCCGCCGTGCCGCGCCCTGCAACAAGAACTCCTCCTG  
 GAACAGGAACGGCTTAACATCCATCGCCATCTCCGGTGGCATCGAAGCCCTGTGCCGTGCT  
 GCCGCCGACTATTTGGGTGGTGCAGTAACCATCGTGGACAGC

RXN03066-upstream  
 AACTGTTGGCATGGCGAAGTACAATGTTTCGTGCAACTGGTCACGTGGAGCGCATCGTCCG  
 CGAAATCACCGCGCGTAATAGCACCAGCTTAAAAACCTT

>RXN03066  
 ATGACATCAGACAAAGACACTGAACAATTGGAAGCGGCAGGCACTGAAATTTTAATGCCT  
 CGCCGCCGTCCGGCACAGCAGCGCAGTCGTGAACGATTCAATCGAATCCTCACCGCTGCG  
 CGTTTCAGTGCTTGTTCGATCTAGGTTTTGAATCGTTCACGTTTGATGAAGTCGCTAAGCGT  
 GCAGAGGTACCGATCGGCACGCTGTACCAATTCTTTGCCAATAAGTATGTATTGATCTGC  
 GAATTGGATCGTGTGGATACCGCAGAAGCTGTGCGGGAGTTGAAGAAATTCCTCCGATCAG  
 GTTCTTGCCTTGCAGTGGCCGGATATCCTTGATGAATTCATTGAGCACTTGGCTAGGCTC  
 TGGCGCATGATCCGTCTCGGCGGGCCGTGTGGCATGCCATCCAGTCCACGCCCGGCAACT  
 CGTGCGACAGCTGCGGCGACGGAAGAGATGCTGGAAATCATCGCGGAAGTTATGCGC  
 CCGCTTGCCCGCGGTGCCGGCTACGAGGAGCGCATGTCACTGGCGGGATTGCTGGTGCAC  
 ACGGTAAGTTCCCTGCTTAACATATGCCGTGCGTGATGTCAATAGTTCCGAAGAGGATTTT  
 GACAGCATCGTGGAAGAAATAAAACGAATGCTGATTCTTACCTCTTCTCCGTGGCTACT  
 GGA

>RXN03066-downstream  
 TAGTCAACACGCACGTTCCACCG

>RXN03067-upstream  
 TTGCTGTTGTTGGCATTTCCTCCGATCCGGTGGACAAGCTGGTAAGTTCCGTGAGGACCA  
 TGAGCTGAACTTCCCTCTTCTTTCCGATGAGGACAAGTCT

>RXN03067  
 GTGATGACTGCGTGGGGTGCCTTTGGTGAGAAGAAGAAATTACGGCAAGATTGTTTCAGGGT  
 GTAATTTCGTTCCACATTTCCTCATCAATGCTGACGGAAGTGTGGCATGGCGAAGTACAAT  
 GTTCGTGCAACTGGTCACGTGGAGCGCATCGTCCGCGAAATCACCGCGGCG

>RXN03067-downstream  
 TAATAGCACCAGCTTAAAAACCT

>RXN03068  
 ACCAAGGAAGCATGCGATTTCCGTGATTCTTTGAGCAACCTCAACGATCTCGACATTGCT  
 GTTGTGGCATTTCCCGGATCCGGTGGACAAGCTGGTAAGTTCCGTGAGGACCATGAGC

>RXN03068-downstream  
 TGAACCTCCCTCTTCTTTCCGAT

RXN03073-upstream  
 CGAAACATCTAGGCAACCCGACTTTTATGTCCCTGCTTGAGTTGAAAACCTGCTGTTCGATC  
 AAAGGTGCCCAATTGTTTCATGCCGTGAGTTTTGCATTA

>RXN03073

ATGGACTCCGTAAATGTCCTGCTCATTGGCATAATCGTCGCGATTGCTGCTTTGCTGCCT  
CGCAAGGGTAAATATGGGCCAATCGCCACGCTACTGGTTGCCGGCGATTGGCTTGGCGTT  
TTCTCTCTCAGTATTTTGGTGATGCTCGTTTTTGGATGGACTAGAGGATTTAGTTTCAGGGC  
TTTTTGGATTCAATCTGGTTTCGGAGTCATCCTTCTTGTAACCTGGCATCGTTTCCTTCGTT  
GCGACACTGGTTTCTAAAACCGACAGCACTAGAAAAGCTTGATGGATTCTTAGCGCCAGTA  
AAAACCTCTAGTTGGAAAACCTGTTGGAGCCGGATTGATCCTTGGAAATCGTTCAGTCAGCG  
ACATCTGTACCTTTTTATGCAAGGGCTTGGATATTTGAGCGTTGGCAATTTAGTCCAGAA  
ATTAGGTATGGCGGACTTGTGGTCTATGCGACCTTGGCTCTGAGTCTGCCGATTATCGTG  
GCAATTCTCGTTGGAATGGTTCGCAAATACCCTGAAAAGTCTGTTGGTAGGTTGTTTGAA  
CTGATTGGTCAAAAATAAGAGAGAGTCACCAAATGGTCGGGCTATCTCGTGTCACTGGTT  
CTGTGCATAATGGGCATTACTTCGATCCTG

>RXN03073-downstream  
TAACTAGCGCATGTACTCATGAG

RXN03085-upstream  
TAAGCAGGATTACGACAAGCGCCAAGATATCAAGCGTCGCACCGAAGAACGCGAAGTCAC  
CCGTGAGCTCGGCCGTCGCATTAAGGGAATCAACGCGTAA

>RXN03085  
ATGAGTATTACATCGCAAAAGTCCACGACGTCCTCAAAGGTGAAAAACCTACGGAACC  
ACCATTTTGGTGGATCGGCTCTGGCCACGCGGTGTGAAAAAGACGACCTTGAGCCAGAC  
CTCTGGCTCAAAAGCGTCGCCCCACAAACCGAACTCCGAAAAATGGTTCGGCCACGACCCA  
GCTAAATTCTCCGAATTCAGCACCCGTTACACCGAAGAGCTCAACGCCAGCAACGACAAA  
GACCTAGAGACGCTTGTGACGCCACCTCCCGCCACCCGTAACCCCTCCTCTACGGTGCT  
GCCGACCGCGACCACAACCACGCCATTGTTCTAGCCAAGTGGCTAAAGAAA

>RXN03085-downstream  
TAACTCCTTGCAAATAGTTGCAA

RXN03089  
CACTCCCTCTACCCCATACCGAAGCCAACTCTGGATCTGGCAACGGCGGTAATGGTGGC  
AATCCCGATGGCGGTCTGTATGGTGGCGACTCGGGTGATGACGACTCCGGCGATGATGAC  
CCCGACCCCGAACCGGACAAGCCTGAAGACGGCAAACCTGATAGTGATAAGCCCCGTAGG  
CCACGGATCAGCGCGGAAAAACACGCCATCATCACCGACGAACTCGCCCGCCTCAACCCG  
AATACCACACCCAGCGCCGAGGAACTACGCACCCAAAGCCCTGAGTCAAGCGATCTGGCGC  
ACCCAGAAAGACCTCCGCACGTGGCTACGCCACCAGGTCACCACCGCGAACAACAAAC  
CCCAACCCCATCACCGCCATGAAAAGGCGCTACCTCTCAGTAGGTAAACCCGATGCCGAC  
AACATGGTCCGCATCAGCGGCCTCGTGCCCGCAGCCACCGCAGCACTGATCACCGCGAAC  
ACCGCACCGTTAACCAAACGTGGCAACCTCGTGGAATCTACCAGCAGCAGAAGATATGCGC  
ACCCGCGGGCAACGCCATGCGGATGCGTTGCATCACATCATGGAGATCTACAACCACGGT  
ATTGTCACCCAGCTCGTGGTGGAACAGCCAGCATCATCTCCATGACCACCGATGAT  
CTTGACGAGATCAACCACGGTGATCATGGCGATGGCAGTCTACTTAACAACCTGTACCCC  
ACGAACACGGGTTACTCATTGAACCTGGCGGAGATCATGAACCTCATCGCTGCGAAATAC  
GACTTCGCTGTGCTCCTCGATGGTGAGACGGGCGAGCCGTTGAACGTCAATAGGATGCAG  
CGCTCAGCGAACCTGACTCAACGCATCGCGTTGTTTGCTTCTGAGTTGGTGTGCTCGGCA  
CCCAATTGTGACAGGCCGAGTTAGAGTGCGAGGTTTCATCATTTAGATCCCTGGATGAGA  
GGTGGGCTGACCAACCTGGTCAATCTCACGCATCAGTGCTTTAATCACCAACCCACGCAAC  
GATGATTCCAGGAGTGGGTCAATGGTAAAGGTTTATGGACCGCGATCCCGTCACTGGC  
AGAGTAGGTCACTACTCAGCAAGTGGTGAGGGGCGGGTGTTTAACCGGTCGGCTGCTGCT  
GATCGTTCCGGTGGTGCA

>RXN03089-downstream  
TAGTCCAGACGTAAGCATTATGG

RXN03098-upstream  
GACCGTTTTGTGTCGATCGCACCGCTGCTGGCTCGCACCATCAACGAGATCTTCGAAAACGG  
TTCCGTCACCACCTCTTCGAGGGCGAGGCCTAAACACCC

>RXN03098

ATGCCCACCGACGCTCTTCAACCGCTCCGGTTGGCATTGGAACCTCTAGCTGATCCC  
GCACGTGCCACCGGAATGGCAAGCTACATGCGGGATCAGTTTCTTTTCTCGGCATCCCA  
TCCACCCCCAGAAAAAGCCTGCAAACCCGTGCTGTCCGCGCTAAAAGAGTTGGACACT  
GACTTTGTCTCAGACTGCTTTGGCGCAGCTGAACGGGAATACCAGTATGTCGCCTGCGAT  
CACATCAATCGCGTCGGCATCACCGATTTAGGTTTGGCAAAGCATTAGTGCAGACCAAA  
TCCTGGTGGGACACCGTCGATTCCCTAGCAAAACCGATCGGCGCCAAACACGATGATGAT  
CTGATGAAAACGTGGGCGCTTGTATGAGGACTTCTGGGTGCGCCGCATCGCGATCATCCAC  
CAACTGGGCGCAAGAAAAACACCGACGCTGCCCTGCTGGCCTGGATCATCGAGCAGAAC  
CTCGGCTCCAGCGAGTTCTTCATCAACAAAGCGATCGGCTGGGCACTGCGGGATTTCGCC  
CGCCACGACCCAGCTGGGTCCGGCTTTTGTGCGACGCCACGGACCTTCCCCACTGAGC  
CGGCGAGAAGCCCTGAAGAATATT

>RXN03098-downstream

TAGCCCTCAGGCATCATCTGAGC

RXN03099-upstream

CCACGCCGTAGCGATCATTGATCACCTTGAGCACTGGGGTAATGGCATTGGTGGTGCATG  
ATGCTGCGGAAACGATCTGATCATCTGCGGTGATGTCGGT

>RXN03099

GTGGTTGATGCCGTACACGATGTTCTTCAGATCGCCCTTGCCCGGCGCGGTGAGTACAAC  
CTTGGCAACGCCCTTGGACTTGAGGTGCTGGGACAGGCCTTCGCGGTACGCCAGCGGCC  
GGTGTGTCTTACCACGACGGCGTCATTGATGCCGTATTCGGTGTAATCAATGGTGGCTGG  
GTCATTGGAGTAGATGACCTTGATTGGGGTGCCGTTGGCCCAGATGATGTTGTTGTCATA  
ATCGGTGGTGATGGTGCCATCGAATCCACCGTGACAGAAATCACGACGCAGCAAGGATGC  
GCGCTTGACCAGGTCTTCTTCACCATTTTTCGCGACCACGATGGCGCGCAGACGAGCACC  
GTCATACAGTGCCCTCGCGGGAAACAGGATGCGGGCCAGCAGGCGACCGATGCGGCCGAA  
ACCGTACAGCACGATATCAGTTGGGTGATGTGCGGTTTCCGCACCAATGACCGGCGCGAG  
AGCGTCCCTCCAGGAAGGCACGCAGGTGCGGTGCTTTCGGATTCTTCGAAGCTGTAGGCCAG  
CTGTCCCAGGTGATCGATGCGGTACCAAGGTTTCATATCTACCAGTTTCGCGCAAAATATC  
CAAGGAGCTTTCCAGTGGAAGTTTCCTTGATATGATGTGGCGGGCGTAGCGGTGAGACTT  
GATGATATCGATGTC

>RXN03099-downstream

TGAGACATTACAAAGGAGACGAC

RXN03104-upstream

ACTGCTGGGAGTAGCCGAAGAGGATGGTGGCGTCAGTGGTCAGGGCGTCAACGTTGCCCT  
GGGACAGTGCCCTCAACACAGGAAGAGTAGGTGTCGTATTC

>RXN03104

TTGGAGCTGAACGCCTGGGAGGACATCCTTGACCTTCTGAGCTGGAGTGGATCCGGAAC  
GGAGCACAGGATCAAACCGTTATCCAAGTCCCTCGAGGGTTTCAATGCGATCGTCATCTTG  
GCGAACAAGCAGAGCCTGGTGGGTAAGCAGGTATGGGCCACCGAAGTTGACGGACTC

>RXN03104-downstream

TGAACGGCCAGCGTTGATGGAGT

RXN03106-upstream

AAATGCCCTCCTGAACTGGAAGAATCAAGCTTGCTTAGAGTCCCTGATTCACCTGCCAGAA  
AGGCACCTCACAGGTGCAATTATTACACAACCCACAGCG

>RXN03106

ATGTCCGCATCCTTTGATGACCCCAACCTCATCTCGCTTGCTGGACTGGTTCCAACCATG  
CACTTAGCCGATGCTGCCAGCCTGTCCACCTTGCCCCAGGACCGTTGAGCATCACCGGT  
GATAAAGGTGCCAATGCTGGTGCGAAGATCGCCTCCCTAGTCGCGGGCATGGTCGCCGGT

GCTGATTCCATC

RXN03107-upstream

GGATTTATATCAATTTTCAGGGCGTGGCGAGCTTTTAGTGATTACGCTCCTACGGTGGGT  
ATCACAAATACCTCAACTAGAAAGTAGGAGATGAGCACCAC

>RXN03107

ATGAGCGATTTTTCACAAAGGCAGAGGACCTCACAGGTAAGGCTAAAGAAGGATTTCGGC  
GAGGCAACTGATAACGAGTCCCTCGCTGATGAGGGCCGTGCGGATCAGGCTAAGGCAGAC  
ATCAAGGATGCTGTGCGAAAACGCCGGTGAAAAGGTAAAGGACGCAGCTAACAAGGTTCTG  
GGTGCCTTCAAGAAGGACGAC

>RXN03107-downstream

TAATCCCGTACTTGTTTCAGGATT

RXN03113-upstream

GTTGGATCTTGCATTGAAAAATGAAAACCTCGTCGGGAATGCAACTTGGGATCACGTCT  
CGGGCAAGAAACGTCCTTAAAAAAGGGGAGTGATTGTGA

>RXN03113

GTGCTTGATTTCTTAGCTGCGAACCCGCTGATTGCGCTGGTGGTTATTTTGGCCGTTGGT  
TTAGCAATTGGTCAGATTAGGGTCTTTGGCCTTTCTTTAGGTGCCGCCGCGGTGCTGTTT  
GTGGCCCTGGTGGTTTCAACTGCAAAATACCGACATCGTCATCCCATGATTGTTTATCAG  
CTGGGCTTGGCGATGTTCTGTTTATGTCATCGGTTTGTCCGCCGACCAGCATTTTTCAGT  
GAGTTCGCTAAAAAGGGCTGGAAGCTCACCATCTTTATGCTCCTGCTGCTGGCAACACTG  
ATTGGTTTGGCGTGGGTGCTTATTAAGTCACTGGGGCTTGATGCAGCGATCGGTACCGGT  
ATGTTTCACCGGCGCGCTGACCTCGACTCCCGGTATGGCAGCGGTGCTGGAATTGATTGAA  
GGAATCGATCCAAGCCTTGCCAGTGAACCTGTTATTGGTTATTCCTTGGCATATCCGGGA  
GCCGTGCTGGGATCCATTGTGGTGGCCGCGGTGGAGCGAACTGCTCAAAGTAAATCAC  
CGGGAAGATGCTCGAAAAGAAGGCATGATACCCGACCGCTGGTGTGGAAGGGTGTGCAG  
CTCAAACCTTGGAAATCACAGGCAGGGTGGGAGATCTTCCACGCCCTTGCAAGGTGAAAGTATC  
ATCGCAACCCGCATTGTGGATGATCCACATACACACCGCCTCGCGGATCCAGATCTGCCG  
ATTACTGAAGGCATGGAACGTGTGATCAACGGCACTGAAGAAGCCGTGGATCGGGCAATT  
AAGGCGTTGGGTGAAGAACGCGAAACCAAAATTGAGGACACAGAGCTGATCTACACCCGC  
CTGACGGTATCTAGCCCTGAGGTTGCAGGTAGAACCCTTGCTGAGCTTGATACTGTAGCT  
CACGGATTCTGATTGCCCCGATCCGCCAGGGCGATTCTGAGGTAGTGCCTAAACCTGAC  
ACCGTGATCAACTACTCTGACCGCATCCCGCTGGTGGTTGCTCCTGGTCTGTGGCTGAA  
GTGCGACGATTCTTAGGGGACTCTGAAAAGTCCCTTGCTGATGTTAATCTGCTGCCTTTA  
GCCATCGGATTATCTCTTGGCCTGTTGTTGGGCGCGATCCCGATTCTCTTCCAGGCGGC  
ACCACGATGTCCCTTGGCTTTGGTGGCGGCCCGATTATTGCCGGCCTGATTTTGGGAGCA  
CTCAAGCACACAGGACCGCTGACGTGGCAGATGCCGTTCACGCCAACCGCACGATCTCC  
ACCTTGGGCCCTGGCGCTGTTTTTGGCTGGTGTGGGTACCTCTGCAGGTGCAGGATTTAGA  
GCTGCGCTTACCGATTCTCTCTCTCTTGATCTACATGGCCGGTGGCTTGGTGATCACCTTG  
GCCTCTGCGCTGCTGTGTGCTGTGATCGGCATGTGGGTACTCAGGTTGAGGTGGGATGAA  
GCCATGGGTGTTGCCGCTGGCACCAACCAAAATCTGCAATTATTTTCTATCTGAATGGG  
CAAACCGGAACGGATCTTGCCAACAGGGGATATGCCACTGTGTACCCACGGCGATGATC  
GGTAAATCCTCGGCGCGCAGATATTGTTCTTGCTGCTC

>RXN03113-downstream

TAAGGTGATTTTGGGCAGTGGT

RXN03115-upstream

GGAAGTCTGGCAGGCAACGTCCGTGATGGCGATGGTGTGCTTGTCAACGTCGCCGACGG  
CGGCCAGAAGCTCGACGTTTCCAGGGCGGTCTAACGGCTC

>RXN03115

GTGGGCAAGCAGGAAAAGCTGCGCATTCCTCTCGATGTTCCGGGAGTGAATCAGAAGAG  
GTAGGTGTAGAACTGCTTGCCGAAGGCTACTACCTGGTAGCCACTTTGCCGGCTGTGCGC

CAGGACTGTGCCCTGGGTGACGTCGTGCGGGCACATCATGTTGATGAGGTCTTGGAATTT  
CAAGAAGTGGCAGTTGCTGGCGGAAACAAAACCCTCCGGGTGCTCGTTGATGCCATCGCT  
GCTGACCACGTGCGAGCCCAACTAGAAACACTTGGGCTACACGTGGAAGCTCCCATGTCA  
GAAATGCTAACTGTCAATATTGCCCCGATTACCGTTCGCACGGTTTGGAGATCCTGCTC  
GATGATCTGCATGCTCAGGGGTAATTTTCAGGGCGTTA

>RXN03115-downstream  
TAGAGCGCCTAATTGTAGAGAGC

RXN03122-upstream  
ATGGACCATGGCGGGATGAGTGGAATGATGAGCGAGGAGGACATGACAGCCCTCGAGGAC  
GCCCAGGGCACCCGAGGCTGCCCCGGCTCTACCTTGAGCAG

>RXN03122  
ATACCGCCCCACCATGAGGGCGGGTCGATATGGCCCCGCGATGAGGTCACTGATGGCCAG  
AACCCGCAGGCCATCGCTCTGGCTGAGCAGGTCAATTGAAGATCAGGAGGCCGAGATCGCC  
GAGATGGAGCATATGCTCAACGAGCTC

>RXN03122-downstream  
TGAACAAGGACATTCCCCGACCA

RXN03134-upstream  
ATGCTGTTTCATCGCTGGCGTTGGCTTTTTTCGAGCCATTCGAGCTCTTCTCCGGGGAGAT  
CCAGTTTGCTGATCAGCGGGTTTGTTCGCGTGGGGCGTG

>RXN03134  
GTGGCTTGGCGCGTCGGCCCAGGTTCCCATGAGCATGACATAGTTGGGTCCCTCCGGCTTT  
GGATCCGAGGCCGACGGAGGATTTTTTCAGCCTCCGAAGGATTGGCGTTGGACAATGGC  
GCCGGTGATGCCGCGTTGACGTAGGCGTTTCCGACATCGACGTGGTCAAGCCAGGTGCG  
GACTTCGTGCGCGTCGAGGGATTGGAGTCCGCCGGTGAGTCCGAAGTCGTTGCCGTTTTG  
GAATTCGATGGCTTCATTGAGGTGGTGGCTTTTCATCAGGCCGAGGACTGGTCCGAATAC  
TTCTGTGAGGTGGAAGAAGGTTCCGTGGTTTGACGCCTTCTTTGATGCCGGG

>RXN03134-downstream  
TGACCAGAGTCGGCCGGTGTCGT

RXN03135-upstream  
TTAGCTTGTCGACGTCCCCCTCTTCCAACACCTCCGGCTTTGTTTGTTTTTTCCAACCAAC  
CGGGCTCTGCTGCGGTGGCGACGGCTTTTGTGGCCCACTG

>RXN03135  
TTGGTTTTGGATGAGCGCTGGGTGGTGTGCGGCTCGTTGATAAATGGGACGAGGGGGGC  
GTCGAGAAGCGTCTCTTTGCTGCGGTCTTGTGTGTGGTTGGGGCCGGGCGCGGGCACGTC  
GATGAGCGTGCGGAGGTGAGATATGGAGGCGCGGAAGCGGCTCTCCTCTCGCTTGAAGGA  
CGGGTTGTGCGCGTCGAGGTGGAAGATGGCGGACATGAAGTTTTCGCTCGCGGCGTTTTTC  
CTCGAGGCGGCGCACGAGGTAAGAAATGGCCACGTGCAATTCCTTGTGGGCGCACGGCTGG  
TACGTAAAGCAGCAGCTACCGACGTCAACGCTGACGGCGCGCGCCTGATCGGACGCCAT  
GCCCTGCAGCATTTCAACTCCACACGGTCCGCTACCCACGCTCCACAGAGAGCAAAATG  
TGCGAATGCTATGCGAAAAGGTTGTGGCCCGCAACGCCAGGCGCAGGCCCTCCATGTT  
TTCTTTGCGCATCGTCCAATAGAGGACGCGCTTGTAATTGGCATCGGTGGCTTGTTTGGA  
AGGTTCTGTGGCAACTGGCCAGCCGGTGATCTGCGCGTGACGTGCTCCATAGGCAAATT  
AGCACCTTGACCAGGCGAACCTTAACGCCCCGCCCGCTGTGTTGACGCGCTCGCGGCC  
GAACTGCGCCAAGTCTGGATTGCACCGAGGGCATCGGGAAGGTACGCCTGCAACACAAT  
TCCGGCTTC

>RXN03135-downstream  
TAGTTCATGCAGCTCTGGATTGG

RXN03138-upstream

AGAATGTTCCAGTCTTGGCATCCAACCAGCCGATTCCGCTGGCCCACACTGGGGCGTTGG  
CGAGGTCTTTGGCGGTGTACAAGTTGAGGACTACCTTGAC

>RXN03138

TTGGATATTGTTCCGAAGGATGTCGCTGAAAGCTTCGCCGTAGGTGAGGTCGTTTTTCTT  
CGCGTGTGGGTGACGGCGTCGTTGATGATGTGCCCCGTCCACAGCATCGACGGAGGCTCC  
GATTTTCGGCGGTTCGCTCTGGGGAGAAGGTCACCTCCGAAAGAGCTGTCGCTCTGGGTACC  
GCGCGAACCAGGTGGCTCTTTCGCTCGTCAAGCAAATCTCTTATTTCTTTTATCTTTCGCTCC  
TATGGACGCCGGGCTTGGCAGAATCTGGTTGGGGCTGGTGGCGGTGAGGTATTCGGTGAG  
GATTGCGTCGGCGCCGGCGAGGTTGTCTGGGGTTGATGCCGGCGAGTTCGTTGCTAATGGT  
GATCAGTCGGGAGAGGTCGAGGTGGTACAGCTTTTGTTCAGGGCTTTGAGTTCGGGCAA  
GTCCGGCAGCGTGGCAAACGCGATGGATATGCGGGAGACCTGCGCTTTTGT

>RXN03138-downstream

TAGACCTGTGACGATGGCGAGGC

RXN03140-upstream

CTCAAGCGATCGGTGGAACATCCACTAACGGGGTTACCAAAAATCCTTCGCGGACACTCC  
CGAAGGAACACTTCTTGCGAGAAGGAAGGAAGAAGCACT

>RXN03140

GTGAAGGGCATTCATCAGGAAATTAGCCGTATCGAGCGTAGCCACGATTATCTGTGGAGC  
GTCCGAGAAGACCTGCATGCACGATTCGACAACCAACTGAAGGCACACTTTGTAGACAGT  
GTCTTGGATAGCATTTGCAGAAGGATATGAAGGCCGAATCAACCGATTCCGCAAAATCTTC  
ATTGAAATGAAAGCGGTTGAAGAGCTGCGCACCATCGCCGCCACCCGCCCAAGCCACCTC  
TTGGCTGCA

>RXN03140-downstream

TAAGACACTTAAAAGTTAAATAA

RXN03141-upstream

GGCCCTGCTGCTTCATGCGGTGAGCTGCGCGACCGAAAGCGATCTGTGAGGAAGCGGTGA  
AATCTGGGTTTCGGTCCAGCTTGAGGATGTATTCACGGT

>RXN03141

GTGGTTGAAGCCACCGGTGTCGCCGGTGGTAATCACGTGGCCACCGTGTGGCATGCCGGT  
GTGCTCGGAGTCGAAGTTGCTTCGTCGATGAAGTTGACTTCGACTTCGTAGCCAACGAA  
GTAATCAGGCATGGTGCAGATGTCGTTTTTCGATGCGCTCGTGATCGGCCGCGTCGGCAAC  
CACGAAGCATTGGCGCTTGTGGGTTTGTCTTCCGGTAAGGTCGCCGGCTTCGCCGCGCG  
GGCTTTTCCAGGGCGTCTTCGGATGGGAGGGTGTACTGGACTGCCTTTTGAACGCCAGG  
GATGCGTCGCAAAGCATCGGAGTGGCCCTG

>RXN03141-downstream

TGACAAACCTGGGCCCCAGAAGG

RXN03146-upstream

TAACGTGGGGGTTTTAAGCTTGCGTAGACATATCGTTTTTCGATAGATTTACATCTTGAA  
ACGATACGCCCATCCACGGCGCATGTCTGAAAGGTTCCCC

>RXN03146

ATGAATCCCCGCATCCTCATGCTGCTTCGCATCATTTTTCGGCGCGGCCCTTCCTCGCACTG  
TTGGTGTGCAAGTCCTGCTCGCCATCAAAATCGTGCGCGATGGCCCTCAACTCCGGCGAG  
CTCTCCCCCATCCCGCTCACCATTCTCGCGAGCTTCGTGATCATCGGTTTCGGGCTCGTG  
CAGTTCATCATCGTCTGTCTGTTCGCGCTACTGCGTCTCGTGGAAGACGATGAAATCTTC  
GACGCCCCACTCGCTCGCCTGGGTTGATCGAATTGCCATCACCATCGCAGCCGGCGCCGTT  
TTACTCCTCCCAATGGCCTACATCGTCGAGAAGTCGACGACGCCCCCGAGCCATCGTC



TTCCGGTCTCATCCTCGCGATGCTCATCACGGGCGTATCCCTGCTGGTAAAAATCATGCGC  
GCACTCCTGGCCCCGCGCCATCGGATTCTCCACGGAAGTGAATCGGTGATC

>RXN03146-downstream  
TAAATGGCCATCATCGTCGACAT

RXN03147-upstream  
CCCTGATCCCGAGGACGATGACCGCCAAAGCGATGGCGCCTCCAATCAGGATGTACTGCA  
GTGGGATTGGGCGGGCGTCATCGATGGCATCGATGCAGTT

>RXN03147  
TTGGAAATCCTCTTTAAGAGCGGTTTGGGATTTCGTTGTAATCATCGGTGCGGTGCGCGAA  
TACTTCGGCGCGGATTTCTGCGGTGCGGGTGCCGGTGGTGGCGGCTTGTGAAGTTGGCT  
GAGTACATCGCTGGCTGGATCGCTGGAGAATCCGCTGATGATGTCTTTGGCTTCGTCGTA  
TGTGTACTCCGTTTGTAAACTTTCTCGGCGTTGGGGTCTGCCAGCGTGGGATCGTCTGG  
GAGGAGCATGGC

>RXN03147-downstream  
TAGGCCTTCGCCGGATTTCGATGG

RXN03149-upstream  
GCTTTACTAGAACCAGTGATCGGTAAACTACCTTTTAGTTCGGCTATTAGCAGTACAATC  
TCTGTGGCGCTGGGATTTATTTTAGTTACCGTATATCGAT

>RXN03149  
GTGGTTATTGGCGAACTGCTTCCTAAGAGCTATAGTATCGTCAATACGGAGAAGGTCGTC  
TTGTTTCGTAGTTAAACCACCTTCAATTATTTTATAAAGTAATGTTTCCTTTTATTTGGGTA  
TTGAATCATTCAGCTGCAGGGCTAGGGAAGCTATTAGGTGTGCGTCTCGTATCTGAAGGA  
GAAGAGACATTGTCTCAAGAAGAGCTGACATTAGTCGCATTGAATTCTTATGAAAAAGGA  
GAGTTGCCAAAGAAGAATATCATTATT

>RXN03149-downstream  
TGAAAACGTGTTTGAATTTGATG

RXN03152-upstream  
GCAAAATATCAGCTTTGACCTGCACATATAGTTGCACAATGGTGAAAGTGCACATAAAGT  
AACTTTCGTATTTCGAATATTTAAACCTAAGGGGTTTAGCA

>RXN03152  
ATGAAGCTATTTTCTCGTACTCCCCCTCGTCGCACTCGGCACAGCTGCTGCAATGGCAGCA  
ACCTCCATCTCCGTTTCCTGCACAGGCTGAAGAAGTCGCACCAGCACAGGTTGTGTACGTG  
GCTGACACCGTAGAAGAAGAAACGGGTAGCTCCAACGGATCTTCTGACATTGACTCTGAC  
ACCATTTTGGATTACGTGCTCGTTATTACTGGCATCGTTGGCGTCTCAGCGCTGGTTTG  
ACCTTCGCTACTGCTTTCCAGCGTTTCAATTCAG

>RXN03152-downstream  
TAAATTTTCAGCGTTAATCACCAA

RXN03153-upstream  
TAATTTGAATTTTAGGGAACCTACCCCGAGCTTTTGCAGTCTAACGCTTATGAGTGCCTT  
TTCACGGCCCTCGTTACGACTACAAAGATCGGGGTATTTT

>RXN03153  
ATGCGACGAATCTGGCTGCTCGTATGCGGCATCGCATTGACTGTGCGCCGGCTGCACGAGT  
GGATCCACCACTCCCAACAACCGTCACGGTAACCGCAACGCCAACGTGCGAGGAGGCTGCA  
TCCACGGAGCCGACCAACGACATACTTGCCAGCCAATTTTCATCCGTGTGAAGTACTCACG  
CAGGAACAGTTTGAAGAAGTCGGATTGGGAGTCTTGATTGTTGAAGACGCTTACCTCGGC

TCGACAGGTTTAGGTTGCAGTTTCGGGAAAGCAGACAGAGAGGATTTTTCAGGTACGTGG  
CTCATTTCAACTGACCAAGCAAACCGACAATTTGTTGAAAACCAAGATCTAGAGACATTG  
GATTGGGGATCCAATGACAATCCAGATCTGTATGTGCATCAAATGTCCGAGACGGGTCGT  
CAATGTGAGGCAGCAGTTGACTATGACTGGGGCCGGCTTACGGTTGACTATCTCGAATTA  
GGTGAGGGCTGGGAGCCAGAAATTTGTGCTCTGATGCTGTTGAAATTTAGAAAATCTC  
ATCAAGGAACTAAGGGGAATTCCA

>RXN03153-downstream  
TGACATTGAAAATTGATCCCTCG

RXN03154-upstream  
AAAGTGCCCTCTCCTAAATCGTTTCTAAGGGCTCGTCAGACCCAGTTGATACAAACATA  
CATCTGAAAATTGAGTCGCTTAAATGGGCGCAGCGGGAA

>RXN03154  
ATGCTGAAAACACTACATTAATCACCGATACCCCTAGGGCACGTGACCTCTACTGAACCCACC  
ACCACAGCCCATGTTCCACTACCTGATGGATCTTCCACTCCAGTCCAAATTTGGGCGTCA  
GATAACAAAGACTCCCAACTGGTGATGCTGTGGCCAGGTTTCGGCATGGGTGGCTATTAC  
TATCGTCCGCTTGCGGGCAGCGCTAAATAAAGCTGGATTCCATGTGGCGATTGGTGAACCTT  
CGTGGTCAGGGGCAAAGTTCCGCGAAGGCTTCTCGGAAAAGTCAGTGGGGATACCATGAT  
CTCGCATCGGTAGATTTTCCGCTGCAGATTGCCGCTGCGAAAAAGGCGCTTGACCTGGAG  
GAAGGCCATCCCATGAGGTTTTTGTGCGATTTCGATGGGTGGGCAGATTTCTTGTCTTTTC  
GCAGCGAGGCGGAGGCTGAGAAATATAATCTTCGGGCGATTTTTCGGGGTGGGTGCAGGG  
TCGCCGTTTAGGCCCTACGTTTAGTCCGAAAAATGGGGAAGCGTTTGGGATTGGGTGCGGTG  
CTGCTTGGTGGGATTGGTGGCCACATTGTGGGATTTTGGCCCGCAAAGTTTTAGGAAAA  
GACCTGGTGGGTATGGCCGACAATCGGGAACACATGAGGGAATGGCGTCGATTCCAT  
AAGCACAATTCCTTTGGACGATCTCACC CGCAGGACATCAACTATGTGGAGGTGATGAAG  
AAGGTGAGCATTCCTATTACTTTTAGTCGTTGTCCTGATGATGAGGACTGCCCCGAGGCA  
TCGATTGATGGGTGGCGAGTTTTGTTCGCCGAGCGCAGATCAAAATGATAGAAATCCA  
GAAGCCCTGGGACATAACCGGTGGGCTCGGGAACCTGAATCAACAGTGAAACTCTTCCTG  
GAACAAGCTCTT

>RXN03154-downstream  
TAGTGACCGATGGAGCGGAGGTA

RXN03156-upstream  
GTATCGACCTCGATGATCGCGTTGCTGCAGAGATGACCATTTTAGGTCGCCCTGTGCCTA  
AAGAAGGATAACCACCACACCAGAAAAGAGTACCTCATT

>RXN03156  
ATGGCTCGAACCACACCTCCACCAGCTGATGTACTCGACATCATCATTTCCACCGTGAAG  
CAGACCATCGGCATTGATCTTGCTGAACTGATTAGGGCCGTGCACTCGGCCAGGCTCAA  
GGTGAGGCACAAGGCAAAGCTAGTGCAGCAGCCCTTGAGCAGGCACCTCATAATGAGCAG

>RXN03156-downstream  
TAAATAACACACACCACATGTGC

RXN03162-upstream  
GGTCAATCAGTTCTTGCCACTGCTCTGGCTTGTCGTAGGTGTACTTCGCGCCGGAGAACA  
GGGTTGCGGAGAAGTTGTCGCCGCCCTTCTGCTGGCTTCTT

>RXN03162  
GTGCACGACGAACACTGGGTGTGGTCCGACGAGAAGGATGCGGATTTTCGCCTTCGACGAT  
GCGTGGCATGAAACGCATATCAACGAGCATGCCGTTGTGCGCGATGATGTACTGGTCACA  
GAAATCCATGAACCTGCCGAGCTTGCGGACTTCAGTGTGGTTGTGCACTGCTTCGGTGCA  
CTTGATTTTCAGTGTCCAATGGCAGTGCGGTGCCTGGCTCGATGGATGCAGCCAGTTTCCTT  
GTCTACCAACTGGACGCGCCAAATGCCGAGCCGGTGGAGCCACGGTTTTGCTTGAGCAC  
GCGCTCACCGAAGGACAGGGAGGTTGGGAAAACCTTGTGGAAGGTCTCCACGTCGTAGTA

CGCCTCGGTGTCGGATGGCACCAGGTCGGTTTGGGA

>RXN03162-downstream  
TAGCTTGACCAGCGCATCTTTCG

RXN03167-upstream  
GCCGCGACTGCGGGTGCTTTTGCGCTGTTGCGTAAAAAATAGTTTTTATTAAGGGCATTC  
CCTGATTCCCAGGTGGTGCCACATTGTTTATGGTGGAGAT

>RXN03167  
ATGAACACGAACCTTGCCGAACCTATACACCGCATTTGACCTTGATCGAAGTGAATCCTCC  
GAAGCTTTAGGTGTTTCCCTTTCGCCCCGCGATCTTCGCTTAGAACAAATGGGAATTGCC  
CAGGACGATCCTCGACGTGCCCAAACCGTCCAAGCTTTCGCAGTGCTTGCAGACCCAGCA  
AAACGCGCCACCTACGATGCTCAATTAGAAGCTGGAGTTCCACTCACCTGGGCGCAGATT  
CAGCATTTAGGAACTTCGGCACCTTGCCTTCCACCCCTACTGCGCAGCCGTTTGCGGCA  
CCTCAGCCGGAGCCGTCGCCGAACCGCAACAGCAGTGGAATAGCGGACAAAACCTATGCG  
TATGGCAATCCGACCATGGATTACCAAACCTCAGCAGAGCTACAACCCGATGCAGGACCAA  
ACCCAAGCGTCGATGTATGCGCAACCTTTCGCGAACACCCCTGCACCGATGTACAACAGC  
AATCAGGTTTTTAACAGGCCTACTGCGGGTACGCGTTTGTGGATGGCGATCCTCGACAGT  
ATTTTTGCCGGCATCGCTGGTGGAATTGTCTCCGGTATTTTCGGCTTTGGATCTGAATTC  
CTCACCAGTGTCATCATGATTTTGGTGCTG

RXN03170-upstream  
GTTAAATCATTTGCCGCCAGAAGAAGACCGCGCGGGCGAATTTGGGCTTGGAGGGAACCA  
AACGGCCACTTTTCCAGTCCAACAAAGTATGAGGATTAAT

>RXN03170  
TTGCCCCACGCCAAAGAGCTCGCCACGAGCTGTGTTTGTGTTGCCACCCCTGCTGTGCCC  
GCGCTTCCCACTGATTCCTGGCGCGCAGTTTGATATCCACCAGGCATATCCGCCTCCCTT  
GCCACCTATGCCCCGAACCTCACCTTGCTGTCCCACACCGCCGAGAATTTAGGAAACCGC  
GCGCTGACGGGCTCGCTGAAATCGAAGACACCGACGACCAACTCGCACACGCATTGGAG  
CGCCTGACA

>RXN03170-downstream  
TGATCGGTCTGATCAGCGCCCTT

RXN03172  
CCAGAGTGGAAGAAATTCAACTCCGGCGACGCAGCCCGCGTTGTCCCAGACGCCAACGCA  
GAGCTCGACATCATCGGCGCACCGACTTCTTGCCGATCGCCCCCTCCTACGCAAACGTC  
AAAACCTCTCCCCGATCTTCGCTGTATGCGCAGCCTCGGCCACGTACCGCTGCCTCC  
CCAGTCACCGTGTTCTTCTCCTCCCACTCCGTGCTCAGCAACGTTGACCGCGGATCCGAG  
CACTACTCCGGACCCAACGGCCTGGGCGAATGGACCTCCGTTGGTTCGCGCAGTAGCCACC  
AACTGGAACGGCGTTGTGACGCCCCGACGAAGCCATCACCGTCAAGGAAGTAAACAGC  
CTCTTTACCGAAGACGCCGCAACCCGATTCAGAAGCACAAGCAGCTGTTTCAGGCAGCT  
CGCGAGGTGAAGAGCAAATCGCCAAGGAAGACCGAAAAGGTGACCCCTACGACAAC  
TCCCCATGGGCTGCAGCAGGCATCGACCCCATCAAGGTCTCCATCGACGGACGCACCATC  
TACACCTTGCGCACCTACCTCGGCGGACAGCCAGTATTCCTCGGAAAATTGGGCGAAATC  
TCCACCTTCAACAGCCAAAATCCCTCCTGCGCTGGCTCGTCAACACGATGACCACGAC  
CTCGCCCGCGCTCCACCTGGAGCGACCTCATGCTCGGCATCAACGCCGGTGAAACCGAA  
CTCCTCGTCCACAGCGACAACGTCTACTCCTTCAACGGCCTGGTCAAAGACATCAACACC  
TCCGTGACGCCGTAGACACCCAACAAATGGCCCCGCGCTACGAACCTCATGGCAGACACC  
GCCGACTGGGCGGACGACGACTCCATGAATTCCCTACTTCCCTGGCCAACCCACGCATGCAG  
GACTACATCTCCTACATGCTCGGCGGACGACACCTCCGGATATGTCCCTCACGCACCA  
TTCAACGACCACTCTGAGAGCTGGCGCGAGCTGGAGGAGATGCTGATCAAGCGATTACG  
AAGTTC

>RXN03172-downstream  
TAGGTCGCCTATTTGGGGTTCGT

>RXN03173

CTCAACCGCGACACCCATCACCTGTGGGTGCTCTTAACCACCGACTCCGACGACTTCGAC  
GCAGACTCCTTTACCACCGAAGTCATCCGGATCACCGGCTACTCCCGCCACGAAGTCAAC  
AACGGCCTTAACGCCATGGCCGCGATGACCAACCTCCCACACCTGCGCGCCATCCAAGAA  
CGCTACTACTTCTGAGCATCCGCTACCTCGCCTCCATCATGATCGCCGTGGCCAAAGCA  
GACCCACCCCTGTGGGAAGAACTCGACCTGCGCATCACCGACGCCCTAACACCAGTCACC  
GCAGGGGAAGTCATGATCCAATCCTCCACCCTGTCCAAACGCATCGCCGCTGGATCAAA  
GAACTCGACCCCGAACCACACAGAGCCCACACCGAAAGAGGACTATGTTACAGTCCAC  
ACCACTGATGAGGCGACCTATGTCCGCATCAAAATCAGCGGCCCAACCGCCTGATCCTC  
AATGACATCATCACCCAACCTCAAAGACACAGACACCGAGGACAGCCTGCCTGAAGCGCTC  
ATGGCGTTCTTGACAGAGAAAATCCAGTTAAAGATCACCAAATACCTCTTACCCACAT  
AAGCACCTTGAGCAGGTGTGGTCACCGGACTACGGTGACATTCATCCGAAGCCTATGCC  
AACGCCACCTCGTGTGCGCCAAGGACTTAGATGAGCTCGCTGGAGCCACGGAGAAGAGC  
TACACCCCGAGTGAGAAAGATGAAAGCCCTGATCAGAGCTCGGGATGGGCATTGCCGCTTC  
CCAGGGTGTTCGCTTCCGGCGAGTAAGTGCCAGGTGATCACATTATCCCGTGGGCGGAG  
GGCGGCCCGACAGCGCGGTGGAACCTGCAGTTGTTGTGCCAGCGGCATCACAATATGAAA  
ACCGATGGTTCGCTTTACTGCTGATGCTAATGGATTGGCGGAGATTAGATGGATTGGGCCG  
ATGGATGTACCAGCGGTGACCAGGCCGACGGGTCCGTTGCTGAAAGCGATGCCGCGGGGG  
ATTTGGGGTCAGGTGTTGAGGGATCGGATCCAGGCTAGGTTTGAGCGGATCCGCGACCGC  
GCCCTCAACAAAGAAGAC

>RXN03173-downstream

TAGAAGCGCACAGGTTTTTGCAT

>RXN03174-upstream

GCGATGCTCGAACGCGCAGAACGCTCCTGGGTAGACAAAGCCGCTGCATACGATTTGCGC  
TGGTCAGATCACTCAACACTGAACGTGATCTACTCTAAA

>RXN03174

ATGCTGCTGACAAATCTATGGGCCATCGGCATCACCGCCGAAGGCATGACAGGCGCGCTG  
GCCGACGGCCGACAAAAAATGGATCTCTTCGGAGTATCCGTCATCGCATGCGTTACCGCG  
ATCGGCGGCGGATCCATCCGCGACATGCTGCTGGGACATTACCCGCTGGTGTGGGTGGAA  
AAGCCACTGTATCTACTGCTGATCATTGGCGCAGCCATTTTGACAGTGTCCATTTCCTTC  
CTGATGGAGCACTTCCGTGTGTTGTTCTCGTGCTCGACGCCGTGGGTCTTTCTGCATTC  
GCTGTGATCGGCACACAAATCGCACTGGAATGGGCTACGGATTATCATCGCAGTAGTG  
GCATCAGTGCTCACAGGTGTATTGGCGGGCGTCATGCGTGACCTTTTGTGTGACCGCATC  
CCACTGGTATTTCAAAAAGAGCTCTACGCATCAATC

>RXN03177-upstream

CTGCCCGATTTATGTTTTCCGACGGCACCATCTGCAAAGAACGAGTGTGACCGGTAGCTT  
TATGGGCTGAACAATTCTAAGGAGAATTATCC

>RXN03177

GTGAAAAAGAAGCTTATGTTGCCTTTGATTGTTGCAGCTTTGGGGTTAAGTGCCTGCAGC  
TCCGAACCTGCAGCAGCCCCACTCGAAGCAGAGCCATTACATAACCTGCTCATTGATGGT  
TCAGAGTCCGGCTTGGACAATGCCACTGAAGGAAACGACACCTCATTAAAGTGGCCAACCC  
ATCAATCTTACAGTGGTCAACGGTGCCTTAGATATCGATGGCTCCTGCGGAAAAGCCCTC  
CAAGCTGTAGAGGACGTCAATCTGGACAGCGTAGCTAGCGCATCCAGGGCACTGGCATCC  
GGCGACAAACAAGTAGGCATCGCCATGTACTCAACCGCCGAAGACAACGACATCTCACCA  
ATGGACCTCTACGCAGACATCGCGAATGCTTGCGAAGACCCCGTCTGATTCCTCCGAC  
ACCACCTACACCTTCGGCAAACTCGATGATGCTCCCGACGGCGCCGTGGATTACCCCTC  
GACATTTGAAGTCACCCCTGACAATCAAGGCTCCACCGTGATGATGATCCAAGAATTAGGA  
AACCACCACATCATCGTCGAGGACTTGAAACCACCCAGAAAGAAACCGCCACTGTCTTC  
GAAGCACAACGCACCAAACTCGAAGAAGGCTTGACAGCTTAAACAGAATTGGCAGCTTGGG  
TGGGT

>RXN03177-downstream

TAAATGCGCCCAACCTAAGAAAA

RXN03182-upstream

ACTCGACACCACCGTCACCAACTTCATGATGGTCATCGCACTCTTAGGATTCATCAGCTC  
TGTATCCGTAGCCCGCTTCCGCAAGAGGGATGGTGCCTAA

>RXN03182

ATGACCTGCAACTATTACCGACATCGTGTCTCTGGTGTTCATTCTCAGCGGCGCATTC  
TTGTCAATCTCCGCATCCATCGGCCTCATACGATTCAAAGACACCATGTCCAGAGTCCAC  
GCCATGACCAAACCCCAAACAACCGGCCTTATCCTCACCGTTGTAGGCGCAATCATCCGC  
ATCTTAGGCCACGAACACTTCGATCAATCACAACGCAGTGACCTCGGAGTCCTTGTCTC  
CTCGTACTGTTTGCCTGCTCACCAGCCAGTG

RXN03184-upstream

GCACAACGTCGCTGGTCAGTGCCATTAGTCACGCAAGAAATGGGCGGGTCCGGTGGAAGA  
CTGGCCTGCTGTTTGGTGCCGCGGGC

>RXN03184

ATGGTTGGCGCGTTTGGCGGTGGCGTTCTCGGGGGCTACATTCTGGCACGATTTTGATG  
ATCGCGTTTGCCTCATGATGATCGCCACGTCGACTGCGATGTTGCGGGGGCGTAAGCAG  
AAGAAGGGGGCGTCGAAAAGCTCTCTTTGGCGCGTCTTGTGATGGCCTGGTGGTCGGC  
GCGGTGACCGGGCTTGTGGTGCGGGCGCGGCTTTTGGTGTTGCGGCGCTGGCGCTG  
CTCGGCGGGCTGTGATGCCGGTGGCTGTGGGCACGTCGTTGGTGGTGATCACGATGAAG  
TCGTTTGCGGGGCTTGCCGGGTATCTGACCAGCGTCAGCTGGATTGGGGGCTGGTGCTG  
ATGGTGACTGCGGCCGCCATCGTCGGTTCTGCTTGCCTGCGGCTTGCAGGCTGCGGCTG  
CCTGAGACTTTGCTCCGCAAAGGGTTCGGGGTGTTTCGTGCTGGTCATGGGCGTGTTTCGTG  
CTCGGCTTGGAGCTTTTA

>RXN03184-downstream

TAAGCTTTTCGACGTCTCC

>RXN03185-upstream

AGCGCCCAACCGTTCAGACCAGCGGTTCTCTGAGGATGCAAAGTCCATGATGGGTNAGG  
TCACTGAGCTGTCCGAAACCACC

>RXN03185

ATGAATGATCTTGACGCTGAAGGTGAAAACGATCCTTACCGCATGGTTCAGCAGCTGCGC  
CGCAAGCTCTCTCGCTTCGTCGAGCAGAAGTGGAAGCGCCAGCCGGTCATCATGCCAACC  
GTCATTCCGATGACTGCGGAAACCACGCACATCGGTGACGATGAGGTTTCGCGCTTCACGC  
GAGTCCCTG

>RXN03185-downstream

TAAAAGCATTTTCGCTTTTCGACG